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Department of Clinical Sciences and Nutrition

MSc in Exercise and Nutrition Science

Exploring the Barriers and Motivators to Physical Activity and Healthy Diet

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Declaration

I declare that this work is original and has not been submitted previously for any degree qualification or other course. This research project is submitted as part of a Master's degree in Exercise and Nutrition Science within the Department of Clinical Sciences and Nutrition at the University of Chester.

Signed:

Date: 29 September 2016

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Literature Review: Exploring the barriers and motivators to physical activity and healthy diet

Abstract

Lifestyle behaviours such as physical inactivity and unhealthy eating are associated with obesity and increased health risks including cardiovascular disease, diabetes and cancer. This review explored previous research into the barriers which may be preventing people from adopting a healthier lifestyle. These barriers could generally be categorised into four major themes: culture; social factors; environment; and personal factors. There appears to be a current understanding of the types of barriers that exist. However there is a gap in research into how to motivate people and overcome perceived or actual barriers, so that future public health interventions can have greater impact and encourage adoption and maintenance of physical activity and healthy eating.

Background

With escalating levels of obesity contributing to a range of health problems, nationally and locally, obesity has become a major public health issue in the UK.

Physical activity levels have been in decline in past decades and a recent government report revealed that in England people are 20% less active than in the 1960's, with a third of men and half of women not getting enough exercise each week (Department of Health, 2015). It also reported that two thirds of adults are overweight or obese (61.7%) and the average diet of the UK population does not meet UK recommendations (Department of Health, 2015). Adult obesity levels have risen from 14.9% in 1993 to 25.6% in 2014 (Health Survey for England, 2014) and the Government Foresight Report predicted this to rise to 60% in men and 50% in women by 2050 (Butland et al. 2007). This rise has been predicted due to the nature of the obesogenic environment which encourages excess energy intake through increased portion sizes and the marketing and low cost of energy dense processed foods, as well as discouraged energy expenditure through increased use of labour saving devices and sedentary occupations and lifestyles (Carels et al. 2008). These are some examples of how the environment is affecting diet choices and physical activity levels in the UK.

The National Obesity Observatory's healthy eating and physical activity publication (Roberts & Marvin, 2011) set targets to sustain a downward trend in level of excess weight in the UK population by 2020. The report also highlighted a gap in current research, suggesting more research is needed to understand how individuals can be motivated and empowered to make health and lifestyle modifications. However, since

this report was published, obesity levels have continued to rise, from 23% in 2011 to 25.6% in 2014 (Health Survey for England, 2014), suggesting recent health interventions have been ineffective. The reasons why many people are still not taking up more physical activity and healthier eating remain unclear and this will be the topic of focus in this review.

This review will focus on the specific area of the borough of Trafford, within Greater Manchester, as this area has produced a number of strategies aimed at improving the health of residents, including the current Trafford 2021 Vision and the 'Our Vision For Your Health' 5 year plan which is in place to support commissioning of targeted interventions to improve lifestyle factors including poor diet and physical inactivity (NHS Trafford, 2014).

A previous study (Charnley, 2008) investigated the health profile and characteristics of a sample of residents in Trafford Borough (n=316), using data from the Trafford Health Profile 2007 survey (Department of Health, 2007). The results showed around 70% of residents were leading a predominantly sedentary lifestyle and 40% of respondents recognised a need to adopt a healthier diet and lifestyle. It was identified that the 18-44 age group were least likely to eat five fruit or vegetables a day and were most likely to state lack of time as a barrier to cooking healthy meals from scratch. The report also highlighted the need for further research to investigate barriers to behaviour modification: barriers preventing physical activity adherence and healthy eating habits must be explored in greater depth to successfully tailor make effective future public health initiatives.

Trafford Borough has also been part of the Greater Manchester 'Taking Charge Together' survey (n=601) which was set up in 2016, as the region has recently taken charge over its own health and social care budget from central government (National Health Service, 2016). The survey identified lack of confidence and self-belief, appropriate local facilities and lack of time as key barriers to becoming physically active. From the evidence generated, the project's key recommendation for action is to stop wasting money on current campaigns and interventions which have no impact and instead, learn more about how to overcome individuals' actual barriers and the root causes preventing healthier lifestyle adoption (National Health Service, 2016).

Review of literature: Barriers and motivators associated with physical activity and healthy eating

Physical Activity

The current UK physical activity guidelines recommended by the Department of Health advise that adults should engage in at least 150 minutes of moderate-intensity exercise each week (Bull, 2010). Scientific exercise guidelines, including the most recent American College of Sports Medicine position stand (ACSM, 2011), have remained fairly consistent over recent decades recommending 3 to 5 days per week of moderate intensity exercise (40-60% heart rate reserve) amounting to at least 150 minutes per week. The recommendations are based on evidence that lower weekly activity levels than this are associated with increased risk of health conditions such as cardiovascular disease, Type 2 diabetes and some forms of cancer (US Department of Health and Human Services, 2008).

The direct cost to the NHS of inactivity linked to coronary heart disease, stroke, diabetes and colorectal and breast cancer was £1.06 billion in 2002 (Department of Health, 2011), which excludes other health issues such as osteoporosis which can be prevented through regular exercise (Snow-Harter & Marcus, 1991).

Evidence supporting the health benefits of physical activity has been widely available since the 1970's but Young, Haskell, Taylor and Fortmann (1996) concluded that having knowledge did not translate to a change in behaviour. After a community-wide health education intervention (n=1056 males; 1183 females; aged between 18-74) there was

little evidence of a treatment effect as the intervention had no significant impact on physical activity levels. Level of knowledge was assessed using a five question survey which had a reliability coefficient of 0.58, represented by Cronbach's alpha, which shows fairly low internal consistency according to Streiner, Norman and Cairney (2014). The study suggested that future interventions focus on promoting how easy it is to incorporate physical activity into daily life as this is likely to be more effective than providing information and knowledge. In addition, they recommended targeting specific subgroups with similar sociodemographics.

Healthy Eating

Current UK dietary guidelines recommend consuming plenty of starchy carbohydrates, fruit and vegetables with a small amount of dairy, fats and proteins, as presented in the 2016 Eatwell Guide, Figure 1 (Public Health England, 2016).

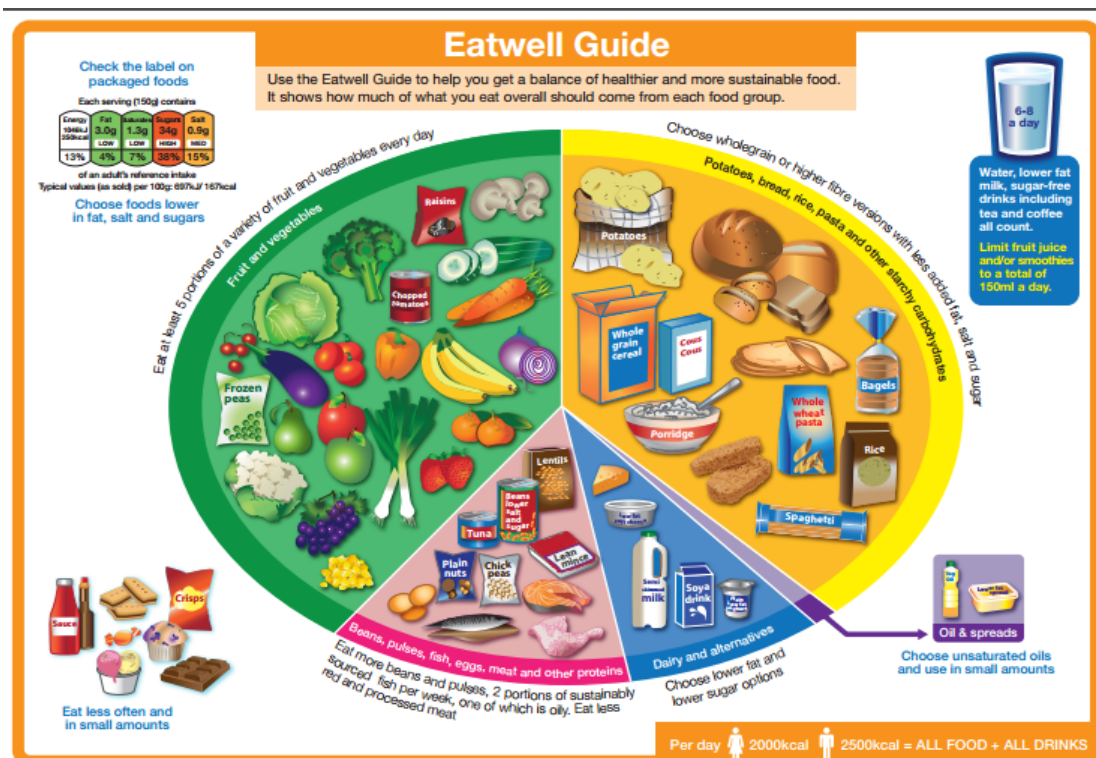


Figure 1: UK Eatwell Guide 2016. Source: Public Health England (2016), Crown Copyright 2016.

There have, however, been conflicting opinions regarding the suitability of the guidelines, such as having a low intake of dietary fat, as evidence has suggested that healthy fat intake may improve lipid profile and insulin resistance, as well as reduce vascular inflammation, which are all contributing factors to increased cardiovascular disease and mortality risk (Bautista & Engler, 2005). A recent meta-analysis (Sofi, Macchi, Abbate, Gensini & Casini, 2014) suggested the Mediterranean diet is a healthier alternative diet as it found an 8% reduction in mortality and 10% reduction in cardiovascular disease events from analysing Mediterranean Diet adherence scores of 4million people. The components of this diet, shown in Figure 2, include foods of low glycaemic index; limited refined carbohydrates and processed foods; high proportion of vegetables, fish, legumes and nuts; high proportion of healthy fats such as olive oil. These aspects have been incorporated into the most recent American dietary guidelines (U.S. Department of Health, 2015) but the UK has yet to address the benefits of this type of diet into government guidelines.

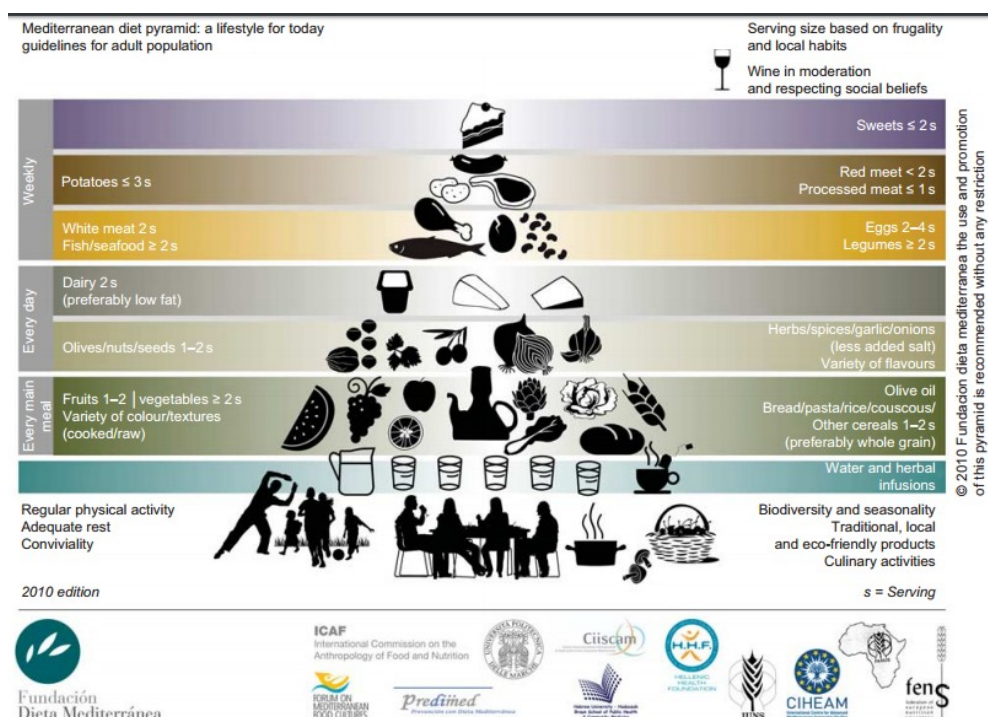


Figure 2: Mediterranean Diet Pyramid. Source: Bach-Faig et al. (2011).

Other intervention studies have found improved cardiovascular health from adoption of the Mediterranean diet including Estruch et al. (2013) who reported a 30% reduction in cardiovascular disease (n=7447) and the Lyon diet heart study (De Lorgeril et al. 1994) which found a 73% reduction in cardiovascular disease in the Mediterranean diet group over a 27 month period, compared to the control group who consumed a Western-style diet.

Barriers and Motivators

The findings from a number of the studies which have explored barriers, motivators and trends regarding healthy lifestyle, have been summarised in Table 1. Lack of time was reported as a main barrier in all studies, except in the case of Roller's study (Roller, 2012) which used elderly participants who were likely to be retired and have more free time. Cost was less of a barrier except in low income populations where barriers arose due to perceptions of healthy food being more expensive and a lack of access to fitness facilities (Chinn, White, Harland, Drinkwater & Raybould, 2000; Nelson, Erens, Bates, Church & Boshier, 2007). It is possible to categorise the barriers and motivators into the common themes of: culture; social context; environment; and personal demographics, as highlighted throughout the previous studies (Table 1) and this review will go on to discuss each of these themes.

Table 1. Findings from studies which explored the barriers and motivators to physical activity and healthy eating.

Reference	Subjects (N, Sex)	Age	Study design	Barriers	Motivators	Trends
Kearney, & McElhone (1999)	14,332 M+F	<15 years	Qualitative: Cross-sectional	Lack of time 41%; Taste 23%; Willpower 18%; Cost 16%; Don't want to change 15%; Preference	None identified	80% associated some difficulty in eating healthily. Knowledge not an obstacle.

			interviews & assisted questionnaire	of others 13%		71% believe they don't need to change, already healthy enough
Chinn, White, Harland, Drinkwater, & Raybould (2000)	6,448 M+F	16-74 years	Qualitative: Questionnaire	Lack of money and access in less affluent areas	None identified	Trends in age group and social class Socio economic position related to barriers reported
Nelson, Erens, Bates, Church, & Boshier (2007) <i>Low Income Diet & Nutrition Survey</i>	5,938 M+F	All ages	Mixed methods: Questionnaire s & interviews	Cost 33%; Don't want to give up liked foods 25%; Willpower 20%	Having more money/food being less expensive 42%; More willpower 11%	Poorer diets in low income populations, accompanied by higher level of smoking, alcohol intake and lower physical activity levels
The NHS Information Centre (2008) <i>Health Survey England 2007</i>	6,882 M+F	<16 years	Qualitative: Interviews	Hard to change eating habits 29%; Lack of time 27%; Cost 20%	Own ill health 48%; Being motivated 38%; Advice from health advisor/GP 37%	28% said they knew PA guidelines, but only 1in10 specified correct targets 80% men and 77% women thought they would benefit from making changes to diet
Costello, Katchinski, Vrazel, & Sullivan (2011)	31 M+F 21 active 9 inactive	60-94 years	Qualitative: Focus groups	<i>Active participants:</i> Lack of time; Potential for injury; Lack of discipline <i>Inactive participants:</i> Lack of time; Potential for injury; Lack of discipline; Inadequate motivation; Boredom; Intimidation	<i>Active participants:</i> Health concerns; Socialisation; Staff & programmes; Accessibility; Facilities; Physician encouragement <i>Inactive participants:</i> Socialisation; Purposeful activity	Differences in barriers between active and inactive participants Inactive participants also perceived themselves to be active though they were not, as they based physical activity in social context
Roller (2012)	59 14 M 45 F	86 ±8 years	12 week intervention (exercise programme)	Fear of falling/straining; Bad weather; Feeling depressed; Lack of transportation	Good for health; Feel better – more energy, feeling accomplished; Keeps mind active	Barriers were less influential to exercise adherence post-intervention compared to pre-intervention
Macdiarmid, Loe, Kyle, McNeil (2013)	50 20 M 30 F	19-63 years	3 day intervention	Competing priorities; Time pressures; Desire for convenience; Lack of motivation to cook; Unhealthy food as better value for money	Environment, society norms and experiences were the areas with most motivation or influence over dietary behaviour	Distorted perceptions of portion sizes, but weren't hungry with smaller portions. Important themes were social, cultural & economic, rather than lack of knowledge or skill
Baruth, Sharpe, Parra-Medina, & Wilcox (2014)	28 F	25-50 years	Qualitative: Focus groups	<i>Healthy eating:</i> Unsure how to eat healthily; Unhealthy foods as comfort; Lack of time/energy; family customs; cost; conflicting feelings of ideal body size – 'curvy' rather than 'skinny' <i>Physical Activity:</i> Lack of motivation; Not seeing quick results; Not fun; Feeling embarrassed about size; Lack of time; Exercising alone; Cost	None identified	Culture, economics and health factors influenced barriers Themes of barriers could be categorised into personal, social, environmental and race/culture
Lara, McCrum, & Mathers (2014)	206 82 M 124 F	61 ±7 years	Questionnaire – online survey	Busy lifestyle; Irregular working hours; Healthy eating involves lengthy preparation; Willpower; Hard to give up liked foods	None identified	Higher body mass index (BMI) and lower Mediterranean diet score associated with greater barriers
Patay, Patton, Parker, Fahey, & Sinclair (2015)	25 M+F	All ages	Qualitative: Formal and informal interviews	Lack of time and energy, feeling too tired	Females: motivated by social reasons Males: motivated by competition	Physical activity underreported as only associated in context of sport and exercise Gender differences in motivators to exercise
Ashton, Hutchesson, Rollo, Morgan, Thompson, & Collins (2015)	61 M	18-25 years	Qualitative: 10 focus groups	<i>Healthy eating:</i> Intrinsic – perceived effort to adopt healthy diet; Cost; Social – peer influence; Lack of time, too busy <i>Physical Activity:</i> Time; Cost; Cognitive emotional – feeling inferior; Social – family upbringing	<i>Healthy eating:</i> Improve health; Sport or performance goals; Physical appearance; Social – expectations to eat healthily <i>Physical Activity:</i> Physical appearance; Social inclusion – making friends; Physical & mental health – relieve stress; Improve fitness	Found unique barriers and motivators for young males compared to studies of other age groups and gender

Culture

When exploring the habitual behaviour and lifestyle patterns of a particular population, it is important to understand cultural factors which may influence choices made in regard to diet and physical activity. Cultural factors such as work and family commitments and customs may dictate the level of priority placed on particular aspects of life.

Working hours and time put aside for leisure activities such as exercise or other physical activities as well as meal preparation may be determined by cultural behaviour and attitudes.

Dishman (1988) explored exercise adherence and examined results from the 1983 Canada Fitness Survey to explore the complexities of behaviour and attitudes relating to physical activity. Lack of time was most consistently reported as a barrier in this study. Dishman commented that this barrier may be more of a rationalisation based on individual attitudes and perceptions, rather than a reflection of reality, and suggested that it is often a case of priorities and a perception that there is not enough time.

Looking into the value placed on being fit and healthy, relative to other uses of time, was a factor to consider. Time management training has been proposed as a factor to help with exercise adherence (Goodrick, Warren, Hartung & Hoepfel, 1984), so that individuals can learn how to schedule physical activity into their daily routine and also learn how to reduce exercise procrastination - instead of talking about it and making excuses why they can't exercise, they make the time to actually do it.

A qualitative study of teenagers in a low-income urban community (M. Fessler, Selimos, Williams & K. Fessler, 2014) supported this and found that barriers to exercise could be categorised into either participants' own perceptions, or reality - actual tangible barriers relating to the individual or environment, such as facilities and resources available. Within these two categories, the emerging themes included body image and peer pressures to fit in, family life and community structures. As this study was on teenagers, the barriers affecting these participants, including peer pressure to fit in and pressures from school and parents, are likely to differ from those of adults, such as cost and lack of time. The issue of age will be discussed in more detail further on in this review.

Lack of time for physical activity was identified as a major barrier by Patay, Patton, Parker, Fahey and Sinclair (2015) when they carried out interviews and observation of a sample of 16 adults and 8 children. Participants generally acknowledged the health benefits of being active but admitted that lack of time and feeling exhausted after work and family obligations prevented them from doing exercise. The authors of this study pointed out however that some of the participants underreported their daily activity level : some did not acknowledge their job, for example bartending, waiting on tables, cooking and standing behind a shop counter, or their transportation methods, for example walking or cycling, as physical activity. Participants in this study generally classified physical activity in the context of sport. A limitation of this study was that health-related fitness and physical activity measures were not collected which makes it difficult to identify trends between factors such as physical activity level, BMI and

dietary habits and it is not possible to generalise the themes reported here to particular subgroups of people.

In addition to the studies mentioned, lack of time was identified as a main barrier to healthy eating by Lara, McCrum and Mathers (2014) and this was reported to be mainly due to “busy lifestyle”, “irregular working hours” and “belief that healthy eating involves lengthy preparation”. These results were in line with the pan-EU consumer attitudinal survey (Kearney & McElhone, 1999) for which 41% of barriers reported related to lack of time, amongst the 14,332 adult participants across Europe.

Another study investigated barriers to long term dietary change in adults by subjecting participants to a three day healthy diet intervention (Macdiarmid, Loe, Kyle, & McNeil, 2013). An advantage of using an intervention before carrying out semi-structured interviews was that the opinions and responses were likely to be based on actual experience rather than just perceptions about healthy eating. One trend that arose was the distorted perceptions regarding portion size where participants thought that the portion sizes were too small compared to their usual meals, yet reported feeling surprised that they did not feel hungry afterwards. Hunger appeared not to be a key motivator in eating larger portions but more their habit – serving or cooking bigger portions and the importance of leaving a clean plate. Cultural expectations, as well as the food environment, is therefore likely to influence habitual eating behaviour and calorie intake. There were mixed reactions at the end of the three day intervention, where some participants were inspired to continue the diet, others wanted to take on some of the principles, and others had already reverted back to their old eating habits.

The barriers reported as reasons for not maintaining this diet included, work patterns (62% identified this as an issue), not fitting in with other family/household members (52%), social activities (50%), taste (48%), cost (42%), being unable to cook healthy meals (34%), not knowing what to buy (30%) and being unable to find the right food when shopping (20%). Lack of knowledge or skill were least common barriers. Again, perceptions of lack of time and priorities placed on certain activities was a common theme throughout this study.

Social factors

Social support is a common theme which may act as a motivator to reinforce healthy lifestyle habits or, in contrast, can act as a barrier in an unsupportive social environment.

Patay et al. (2015) identified gender differences in physical activity motivators. Social factors, such as meeting with friends and being part of a group, socialising and enjoying exercise together was a key motivator for women. Men on the other hand appeared more motivated to engage in physical activity for competitive reasons, such as achieving fitness targets and improving their skill in order to compete with others or as part of a sports team. It was also reported that men felt more obligated to show up to group sessions compared to women who did not view the responsibility to show up as a motivator.

Common themes that emerged from focus groups with adult females from disadvantaged areas (Baruth et al. 2014) related to family responsibilities and competing demands of time. For example, mothers reported feeling that role strain and having family commitments meant that they were too tired at the end of each day to then fit in exercise, or they would be more likely to resort to quick and convenient food options. This supported evidence from a meta-analysis by Bellows-Riecken and Rhodes (2008) in which a negative association was found between parenthood and physical activity level ($d = 0.41$ to 0.48) and mothers generally tended to be less active than fathers.

Baruth, Sharpe, Parra-Medina and Wilcox (2014) found that food was also recognised as part of socialising and bringing people together. Encouragement or temptation to eat more in these social environments may be a barrier to maintaining healthy eating patterns. More willpower and motivation may then be required within unsupportive social environments, which in itself has been identified as a key barrier to healthy lifestyle (Kearney & McElhone, 1999; Nelson et al. 2007).

On the other hand, social pressures can act as a motivator. Ashton et al. (2015) identified gender differences in perceptions about healthy lifestyle and summarised that young males often felt motivated to exercise or eat healthy in order to improve their physical appearance and attractiveness or to reach sports or performance goals. Social inclusion was also reported as an influencing factor with expectations to fit in with healthy eating behaviours of others around them and to join in with friends who are taking part in sport or exercise. The advantage of discussing these issues with

participants within a focus groups setting is that it provides the opportunity to obtain personal and group opinions and perceptions. However, it may raise an issue of social pressure especially for a group of young males who may feel uneasy about discussing individual feelings or opinions openly in a group setting (Morgan, 1998).

An interesting point raised by Allender, Hutchinson and Foster (2008) in a systematic review suggested that life changing events or life circumstances, such as: changes to employment status; changes to physical status including health, disease and disability; and changes to relationships and family structure, can all have either a positive or negative impact on participation in physical activity.

It has been suggested that social support is a correlate of physical activity level but not a determinant (Bauman et al. 2012). However the studies discussed in this section have identified social factors such as work and family commitments and social occasions being barriers to a healthy lifestyle and also that having social support and feeling socially included are aspects which can help to motivate and reinforce healthy behaviour.

Environment

Another common theme is the environmental structure and the availability of resources, facilities and support needed to live healthier. Cost was identified as a barrier more frequently in areas of a lower socioeconomic status (Table 1). Chinn et al. (2000) found trends in age group and social class, from studying results of the 1992 Newcastle Health and Lifestyle Survey which had a sample size of 6,448 participants

aged 16-74. Lack of money and access to transport were identified as the main barriers in less affluent areas. It was suggested that strategies must be tailored to suit different social groups and areas being targeted.

In a more recent survey, Nelson et al. (2007) found that unhealthier diets were more common in low income populations, where higher rates of smoking, alcoholism and physical inactivity were also more common. Again, this study used a large sample size (n=5938) of all ages, from low income areas, using both questionnaires and interviews to explore barriers and attitudes. 33% of participants reported cost as the main barrier to healthy eating, with 42% saying that if they had more money or if food was less expensive then they would be more motivated to adopt healthy diets.

Chinn et al. (1999) recommended that increasing incentives, subsidies and motivational strategies to improve access to resources and facilities may be beneficial to this population. Improving access however does not necessarily lead to adoption or maintenance of that behaviour, as identified by Dishman (1988) who highlighted that the 'desire to be healthy is not sufficient motivation'. Programmes to encourage adherence must reflect an individual's intrinsic interests and provide enjoyment in order for long term maintenance: people are more likely to not just take up exercise and healthy eating but also continue with these lifestyle changes, if they actually enjoy doing it.

Personal factors

An individual's demographics and personal circumstances is an important factor which may influence habitual behaviour and this is the final theme identified. Age, gender, socioeconomic status and health status – for example, being overweight or inactive, have been identified as potential barriers to healthy eating and physical activity (Chinn et al. 2000; Nelson et al. 2007; Costello, Kafchinski, Vrazel & Sullivan, 2011; Lara et al. 2014; Patay et al. 2015; Ashton et al. 2015)

Lara, McCrum and Mathers (2014) explored behaviours and barriers related to healthy eating among individuals of retirement age by carrying out online surveys to assess health status and lifestyle, Mediterranean diet adherence and perceived barriers to healthy eating. The sample included 82 males and 124 females, aged 61 ± 7 years. An inverse significant association was found between diet score and BMI ($r = -0.017$, $p = 0.017$). The number of perceived barriers was positively associated with BMI ($r = 0.28$, $p < 0.001$) and inversely associated with diet score ($r = -0.273$, $p < 0.001$). This suggested that those with a lower Mediterranean diet score are likely to have a higher BMI and more perceived barriers. Individuals who score lower on the diet score test are likely to be leaner and report fewer barriers. Results from this study therefore implies that older people who consume an unhealthy diet and are overweight are more likely to perceive greater barriers to eating healthily. Barriers reported included: lack of time; irregular working hours; lack of willpower; and difficulty in giving up liked foods. A limitation to this study is that it used self-reported information so there may be the potential for recall issues as well as answers being influenced by social desirability. In

addition, as this study only used individuals of retirement age, these results cannot be generalised to other age groups.

In contrast to studies using elderly participants, Ashton et al. (2015) found that young males were more influenced by social pressures and the motivation to improve physical attractiveness.

These studies highlight the importance of tailoring of the design of health promotion and intervention initiatives to take into account differences in perceptions and barriers between males and females, as well as difference in age groups. In addition, the results from the study by Lara et al. (2014) showed that an individual's BMI may also be a factor and those who are overweight or obese potentially face more barriers to adoption of healthy eating and activity.

Costello et al. (2011) carried out focus groups with active and inactive adults, aged 60-94. Those who were active each week reported fewer barriers and more motivators compared to those who were inactive. Lack of time and discipline were common barriers for each, however additional barriers of boredom, intimidation and inadequate motivation were reported by the inactive individuals. Socialisation was a common motivator between participants, but some of the additional motivators for those who were active included: health concerns; facilities; the programmes available and encouragement from staff and physicians. There is the issue of cause and effect when trying to determine the reasons for these additional barriers and motivators – becoming more active may have removed some of the barriers and demonstrated more of the benefits and motivators to physical activity, or alternatively, perhaps the

active individuals perceived fewer barriers and more motivators from the beginning, enabling them to be active more easily.

A study which supports the concept of removing barriers through demonstrating and taking part in physical activity is an intervention study by Roller (2012). 59 elderly participants took part in a 12 week exercise intervention programme. The main trend that was found was in the barriers reported before and after the intervention – barriers were less influential to exercise adherence post-intervention compared to pre-intervention. It was suggested that adherence can be improved by minimising barriers and strengthening motivators. Once participants knew how to take part and were engaged in the programme, the barriers were reduced. It is important to note however that the previous two studies used older adults so it is not possible to generalise these findings to other age groups.

A final point that was made in many studies including Dishman (1988), was the importance of understanding individual differences when it comes to promoting healthy diet and exercise adherence. Differences in demographics such as age, gender, socioeconomic status and health status may all impact the types of barriers and motivators which will influence behaviour and attitudes. However, individual differences can lead to differences in interests, preferences, levels of enjoyment of particular activities and also different personal goals and targets.

Conclusion

In conclusion, factors relating to lack of time and cost have been identified as some of the key barriers to a healthy lifestyle. Lack of knowledge or skills seems to be less of a barrier as there appears to be information and resources available, however lack of time and perceptions of priorities has been identified as a barrier in many studies. Cultural, social and environmental factors have been identified as common trends that effect healthy lifestyle adoption, as well as personal circumstances and individual differences. The studies in this review have highlighted that the removal of the barriers to exercise or healthy eating is a key to adherence and this demonstrates the need for further investigation to explore these barriers and understand how to overcome them. There also appears to be a gap in research as to how to motivate individuals to improve their lifestyle and it is vital to understand this if community health interventions are to succeed.

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Project Report: Exploring the barriers and motivators to physical activity and healthy diet in adults, using interviews within Trafford Borough.

Rationale for journal choice:

Public Health Nutrition (Cambridge Core): This qualitative study aims to provide insight into barriers and motivators to improved nutrition and health and therefore may be of interest to epidemiologists and health promotion specialists and may provide practical application for public health issues and future health strategies.

Abstract

Objective: To investigate the perceived barriers to healthy lifestyle adoption and explore what motivates people to adopt and adhere to physical activity and healthy diet.

Design: Face to face semi-structured interviews in conjunction with Mediterranean Diet Score and Physical Activity Questionnaire with Trafford residents aged between 18-40 years, male and female.

Setting: Trafford Borough, Greater Manchester.

Results: A total of ten interviews took place and five major themes emerged providing insight into barriers to healthy eating and physical activity. First, self-confidence, will power and perception of body image were common personal factors. Second, the

importance of routine, consistency and finding enjoyment from activities and healthy eating was key to healthy lifestyle adherence. Social factors also played a key role, especially in young adults, who were often influenced by the behaviour of friends and peer groups. The fourth theme related to environmental factors and the promotion of facilities and resources available in Trafford. The final theme suggested participants were generally aware of health risks associated with behavioural choices, however they felt it would help to have clearer information and guidelines about how to take steps towards improving their health and lifestyle.

Conclusions: The findings from these interview responses from Trafford residents provide insight into individual perceptions of exercise and healthy eating.

Consideration of these factors may be beneficial when tailoring future public health strategies to particular populations.

Keywords: Barriers to exercise, healthy eating, public health, lifestyle choices

Introduction

Unhealthy eating and physical inactivity are major risk factors for non-communicable diseases including cardiovascular disease, diabetes and some cancers (World Health Organisation, 2014). In England it has been reported that the highest impact in economic burden to the NHS comes from risk factors from poor diet, followed by physical inactivity, smoking and alcoholism (Scarborough et al. 2011).

How to specifically target interventions and limit the harm and risks associated with inactivity and poor diet is therefore an area with very current and pertinent relevance for future research.

A previous study (Charnley, 2008) investigated data from a health profile survey of Trafford residents and found lifestyle characteristics such as diet and inactivity corresponded with high rates of cardiovascular disease and diabetes. 40% of respondents recognised they needed to adopt a healthier lifestyle and 70% reported living a predominately sedentary lifestyle, reinforcing the need for further research to explore perceived barriers.

In Trafford, average life expectancy is higher than the UK average (79.9years for men, 83.5years for women) yet the Index of Multiple Deprivation shows certain areas of the borough are in the bottom 10% nationally for health deprivation and disability, with 32% of residents dying before 75years (Trafford Innovation and Intelligence Lab, 2016).

66% of these deaths are preventable: modifiable factors include smoking, inactivity, alcohol intake and obesity (Trafford Innovation and Intelligence Lab, 2016).

The National Obesity Observatory (Department of Health, 2011) highlighted a gap in current research in understanding how individuals can be motivated to make changes to behaviour to improve health. Previous studies identified barriers to exercise and healthy eating, such as time and cost, so it is expected these may be common themes arising in interview discussions (Lara, McCrum & Mathers, 2014; Kearney & McElhone, 1999). This study aims to gain insight into actual barriers and motivators by exploring the personal views and influences of the study cohort.

Methods

Participants and recruitment

Participants were recruited to take part in face-to-face interviews to explore perceptions and experiences relating to barriers and motivators to physical activity and healthy eating. Trafford residents aged between 18-40years old were targeted.

A snowball sampling approach was used to recruit participants, whereby initial contacts including work colleagues, friends and associates of the researcher were approached and asked for network contacts (Biernacki & Waldorf, 1981). This technique cannot claim to produce a statistically representative sample as it relies on contacts known to the researcher, however this was the most practical and appropriate method of sampling for gaining this type of qualitative data relating to attitudes and perceptions, from Trafford residents.

Trafford residents were approached, asked about their interest and willingness to participate in the survey, then provided with the participant information sheet (Appendix B). The aim was to recruit volunteers, with an even distribution of males and females, from various ages and occupation statuses, as well as different Trafford postcodes.

Consent forms (Appendix C) were signed by the participant and researcher before interviews took place, confirming their agreement to take part in the study.

Participants could withdraw from the study at any time. Interviews were audio recorded with consent. Ethical approval and permission to conduct the interviews was obtained from the Faculty Research Ethics Committee, University of Chester (Appendix A).

Sample size determination

A total of ten interviews were conducted, with ten participants. Initially a target sample size of twelve was set using the concept of saturation (Mason, 2010) and it was recommended this was an appropriate sample size for qualitative interviews with a non-random sample according to Guest, Bunce and Johnson (2006). However, due to time constraints and the availability of participants, ten interviews were conducted and this will be discussed in the limitations section of the report.

Study design

Interviews began with an assessment of current behaviour using a modified Mediterranean Diet Score with a 0-55 point scale (Panagiotakos, Pitsavos, Arvaniti & Stefanadis, 2007), to assess participants' degree of adherence to the Mediterranean Diet (Appendix E). This measure was validated as an acceptable food recall method for estimating diet quality (Benitez-Arciniega et al. 2011).

The Mediterranean diet was used as a reference to how healthy the participants' diets were as increasing evidence suggests this diet plays a significant role in maintaining and improving cardiovascular health: a recent meta-analysis by Sofi, Macchi, Abbate, Gensini and Casini (2014) found an 8% reduction in mortality and 10% reduction in

cardiovascular disease in those who adhered to a Mediterranean diet (n=4million). It may also protect against other long term conditions such as diabetes, which was inversely associated with adherence to a Mediterranean diet in a 4 year intervention (Salas-Salvado et al. 2011), with incidence rates reduced by 52%.

The International Physical Activity Questionnaire (IPAQ) (Appendix F) assessed participants' current activity level. This has been validated as an acceptable measurement of physical activity level among 18-65year olds in diverse settings (Craig et al. 2003) and has been significantly associated with cardiorespiratory fitness in healthy adult men ($p<0.05$) (Silva-Batista, Urso, Silva & Bertuzzi, 2013).

The scoring system for the tests were: low (score = 0–20), moderate (score = 21–35) and high (score = 36–55), to indicate participants' Mediterranean diet adherence (Panagiotakos et al. 2007), and activity level was scored as low, moderate or high (IPAQ, 2004). Scores from both tests were used by the researcher to determine the direction of the questioning for the semi-structured interview.

Specifically, if the respondent had a low score then the focus was on discussing the key barriers possibly preventing the respondent from being more active or eating healthily. If the respondent had a high or moderate score in the behaviour tests, the researcher directed the discussion towards exploring what motivates them to behave this way.

Face-to-face semi-structured interviews were then conducted to obtain in-depth descriptions of barriers and motivators relating to physical activity and diet. The

method of semi-structured interviews was most appropriate in order to explore personal perceptions, attitudes and experiences in greater breadth compared to structured interviews or questionnaires (Denzin & Lincoln, 2005). This method was used instead of focus groups as potentially participants would be less likely to discuss or mention sensitive issues or personal reasons in a group setting.

Interview question development

A literature review was conducted to determine a list of known barriers to diet modification and physical activity adherence; this provided a conceptual framework for the development of the interview questions. The study aimed to explore in depth, attitudes and perceptions relating to barriers such as lack of time and money, as well as social, cultural and environmental influences.

A pool of potential questions was created and questions to the participant were selected based on results from their Mediterranean diet score and IPAQ activity level. Interview structure and sample questions can be found in Appendix D. This study took on a similar design to a previous qualitative study (Beardsworth & Keil, 1992) which used semi-structured interviews to investigate and explore motivators, beliefs and perceptions relating to the vegetarian diet. Thematic analysis was used to group together common themes, experiences and beliefs (Braun & Clarke, 2006). Each session was recorded using digital audio recording equipment and lasted between 30-50minutes. The researcher then transcribed the interviews into written

form. Interviews took place within Trafford in a public but quiet location, convenient to participants.

Data analysis

The Mediterranean Diet Scores and IPAQ physical activity levels were descriptively analysed using the software Statistical Package for Social Sciences (SPSS), (IBM SPSS Statistics for Windows, Version 22.0 (2013), IBM, Corp., Armonk, New York). P values of <0.05 were considered significant and the samples were checked for normality of distribution using Shapiro-Wilk tests (Coakes & Steed, 2007).

The interviews were analysed using a thematic analysis procedure (Braun & Clarke, 2006). Data was transcribed manually and coded into themes and patterns. Themes were identified inductively and the content was analysed both in terms of manifest and latent themes, an analytical process involving a progression from description to interpretation data (Joffe & Yardley, 2004). This was used to uncover content to gain a deep understanding and interpret meanings that may lie beneath the surface of answers given in interviews.

Results

Participant demographics

Ten participants took part in the study, with an age range of 22-33years. The majority of participants were employed, with some being full-time students. Table 1 provides a summary of the demographics of those who took part:

Table 1: Participant demographics

Participant Number (P)	Age (Years)	Gender	Occupation Status	Postal Area	Diet Score	Activity Level
1	33	Male	Employed – office worker	M41	23	Moderate
2	22	Male	Student	M33	30	High
3	32	Male	Employed – office worker	WA15	24	Moderate
4	24	Female	Employed – office worker	WA14	27	High
5	30	Female	Employed – nurse	WA15	26	Moderate
6	28	Male	Employed – personal trainer	M31	23	High
7	33	Male	Employed – office worker/part time sports coach	M33	34	High
8	25	Male	Student	M33	31	Moderate
9	24	Female	Student	M33	31	Low
10	24	Female	Employed – office worker	M33	29	Moderate

Questionnaire results

Results from the diet and activity scores (Table 1) were analysed using SPSS. No significant correlation was found between participants' Mediterranean diet scores and activity level ($p=0.934$), using Spearman's Rho, and there was no relationship between age and diet scores ($p=0.337$), using Pearson's Correlation as the data was normally distributed. Additionally, Mann-Whitney U Tests showed no significant difference between gender and diet scores ($p=0.748$) or between gender and activity level ($p=0.289$).

Qualitative analysis

Barriers and motivators to healthy eating and physical activity were identified from the interviews and are summarised in Figure 1.

Physical Activity Barriers <ul style="list-style-type: none"> • Will power, feeling too lazy • Not enjoyable or fun – too boring • Not seeing results quickly • Feeling intimidated, self-conscious or embarrassed • Lack of facilities or lack of promotion of facilities available • Weather and climate 	Physical Activity Motivators <ul style="list-style-type: none"> • Improving body image, attractiveness and appearance • Losing weight • Social factors: seeing friends, talking, being part of a team • Competitive: achieve targets, winning • Having a routine or planned activities • Achieving fitness goals, improving strength, physique and performance
Healthy Eating Barriers <ul style="list-style-type: none"> • Lack of time, less convenient • Stress • Cost – healthy food more expensive • Social: temptations from others, eating out, drinking at the weekend • Weather and climate: harder to eat healthily in winter 	Healthy Eating Motivators <ul style="list-style-type: none"> • Weight loss and seeing results • More energy, better sleeping patterns, feeling better in yourself as a motivator to continue • Influence of parents, friends or family members • Motivated to eat healthily when adhering to exercise routine

Figure 1: Barriers and motivators to physical activity and healthy eating, identified from semi-structured interviews with adults (aged 22-33years) in Trafford Borough.

Five major themes emerged from comparing the attitudes and perceptions of participants using thematic analysis. These themes were:

1. Personal factors – willpower, self-image, confidence
2. Perceptions of exercise and healthy eating – need for routine, results
3. Social factors – influence of others, social media pressures
4. Environmental factors – facilities available, accessibility, cost
5. Perceptions of future health risks – knowledge of potential risks due to lifestyle

Theme 1: Personal factors

The sample group ranged from highly trained individuals with fairly strict exercise and diet routines, to those wanting to lose weight or improve their lifestyle but struggled to maintain a healthy diet and regular exercise. Five participants worked in an office environment and they tended to express self-confidence issues relating to body image and being unhappy with their appearance:

“I look at myself and think I look fat and bad...so I decide to go on a healthier programme or diet. It’s mainly body image...I feel... sometimes on a personal thing, relationship-wise, people won’t look at me the same because I don’t have that body, they often judge by appearance and how you look.” (P1)

“You want to go to the gym and look nice and fit. That’s how it is. OK if you are training for the Olympics fair enough but mostly the average person goes to the gym because they want to look good.” (P4)

Participants frequently mentioned they were afraid of not fitting in or doing the wrong thing in the gym, especially around others. They felt uncomfortable and these fears contributed to feelings of embarrassment or inadequacy:

“I’m a bit self-conscious in the gym I think...I think it’s the close proximity I don’t really like as well” (P10)

“You might be in the gym next to someone who looks like a ripped guy and you’re there with flab hanging out...you can see someone who can lift weights ten times as big as you and you can’t, then yeah you wouldn’t go back to those weights again.” (P1)

“I don’t feel comfortable doing weights in the gym on my own, you just don’t know what you’re doing... it seems like there’s a right way and a wrong way of doing things.” (P2)

Participants often admitted to lack of will power and having negative views of their appearance or ability to participate more in a healthier lifestyle. Barriers of tiredness, laziness and the need for quick convenient options were also noted by these individuals. Some participants talked about attending group exercise classes as an option for overcoming these barriers:

“...if you’re feeling lazy or in a mood where you can’t be bothered you’ll just leave the gym and go home, whereas...in a class it’s not like you can just walk out of the class

and the instructor is there to say if you're doing something wrong or doing it right"
(P5)

Those who were highly trained or worked in the fitness industry (P2,P6,P7) gave motivators as improving body image and physique goals but were additionally driven by seeing results and the fact that regular exercise and healthy eating had become a normal part of their life:

"It is partly an aesthetical thing, body image and the fact that when I started I noticed...a change in my body then you kind of want to keep that going, you want to put on more muscle and for me it's a lean muscle target." (P2)

Participants were aware of needing to take ownership of their lifestyle choices, expressing feelings of reward and pride when they made good choices:

"You feel more confident and better, look in the mirror and think yeah I've done this, done perfect exercise this month and now I look and feel better because you did it, no one else has done it for you." (P4)

"I think shopping for healthy stuff is good – it makes your trolley look a bit nicer. You can go like, look at my lovely trolley!...I think rather than piled high with chocolate and stuff, it looks better. Then I think you feel good about yourself getting healthy stuff..."
(P10)

Theme 2: Perceptions of exercise and healthy eating

The way individuals perceived exercise and healthy eating had an impact on their views regarding barriers and motivators. Those struggling to maintain a routine tended to express feelings of boredom or stress when it came to exercising:

“I have to find something that doesn’t feel like exercise, like we sometimes play tennis, that doesn’t really feel like exercise to me. I prefer to do something that’s more fun.”

(P10)

Level of enjoyment was mentioned frequently as a facilitator to maintaining healthy lifestyle choices and the highly trained individuals talked about aspects they enjoyed and gained satisfaction from:

“I exercise because I really enjoy it, I love the way it feels and love the pump...I like to learn as well, I like to learn about myself and see how far I can push myself” (P6)

The need for routine and consistency was a common trend throughout interviews.

Participant 2 discussed how finding a routine was a key factor in helping maintain fitness and physical activity level:

“You reach a point after starting off where you kind of hit a wall, once you get past the wall it no longer becomes a chore and you start to enjoy it...it’s getting to the point where you change from feeling that you should go or have to go, to it becoming a routine” (P2)

Another participant mentioned that the consistency of buying the same healthy foods helped him make healthy choices when shopping:

“You just get into a routine...it’s like I know the things I should have and then when I’m shopping I just automatically put them in the basket” (P8)

Some participants who had difficulty in maintaining a healthy routine mentioned the right mindset as an important factor, that it’s often a case of ‘all or nothing’ when it comes to diet and exercise:

“It’s boom and bust...either very very healthy or very very unhealthy, there’s no mid ground really with me. It’s all part of the mindset isn’t it? If you’re active and have a healthy body, healthy mind...it just helps with work and day to day living really. If you’re in a good place in terms of your health...it translates into other aspects of your life...You can feel the effects of not eating healthy when you go to the gym so, it’s all encompassing really” (P3)

Interpretation of what is considered healthy or unhealthy may have differed among participants: participant 9 scored well on the diet questionnaire (31; Table 1) but said, “I think my diet is quite unhealthy because I eat lots of sweets”, although as a vegetarian she scored highly on fruit and vegetable intake and no meat consumption. Participants’ own perceptions of what is healthy or unhealthy may influence their behaviour and motivation towards lifestyle changes.

Participants mentioned the need for seeing results in terms of weight loss and aesthetic or fitness targets as a motivator to continue, or a barrier if they did not see quick results:

“Results are a big motivation, it’s just trying to get them so it’s like when nothing happens it’s a bit of a bummer!” (P10)

“I went to a gym for about 2 years and I didn’t really see any change in myself and I was trying quite hard, so then thought I’m just not going to bother with the gym.” (P8)

“It’s...seeing results really...it becomes more of a lifestyle and way of life” (P3)

Participant 7 suggested starting with increasing activity level and then move onto improving nutrition:

“When you have the activity, then you can start to increase levels of teaching about nutrition...to make the kids, when they become older, be responsible for what they need to be doing...It’s ownership” (P7)

Theme 3: Social factors

Making arrangements with others, being part of team or having a competitive streak had a positive effect in motivating participants. This was especially prevalent with student participants (P2,P8,P9) who appeared influenced by social factors such as participating in activities with friends:

“To start with, I didn’t want to go unless someone else was going, I hated the gym on my own...if everyone had someone to go with at the start then more people would carry it on. It’s less intimidating and scary, if you do something wrong you’re with friends so it’s ok and you don’t get embarrassed.” (P2)

“It’s a social thing, I’ll be meeting up with my friends...I enjoy the activity [football] and I enjoy the chatting and all of that stuff that goes on before it.” (P8)

“I think that if my social group all liked to do certain types of mild exercise that definitely would be a part of my life...Instead of saying...let’s go to a restaurant, we’d go do something else, I think that would be a good thing for me.” (P9)

One participant expressed feelings of pressure from social media:

“All my social media is just girls with abs and stuff at the minute so I flick through those and think I probably should have a salad” (P10)

Theme 4: Environmental factors

Cost, accessibility and availability of facilities were mentioned as healthy lifestyle barriers by some participants, although some discussed ways of overcoming cost as a barrier, such as shopping in certain supermarkets or buying in bulk:

“I do most of my food shopping in Aldi or Lidl...fish, chicken, meats are...really nice and fresh from those stores and not expensive. Whereas when I’d go to Sainsburys...it would be really expensive to eat those kinds of foods” (P5)

“if you’re...just buying single packs of fruit and veg it becomes quite expensive – but if you buy in bulk you can look at buying things that have a longer shelf life” (P6)

Participants mentioned facilities are available in Trafford (Table 2) but are not always fully utilised or well promoted:

“Trafford could be doing a lot more to open people’s eyes as to what is available to them” (P7)

Table 2: Trafford facilities mentioned in interviews

Participant	Facilities highlighted as being under-promoted or underutilised
P4	“You can...go to the park and rent a bike...play tennis... show people how easy it is...”

P5	"People might not know you can go to your GP and get a reduced or free gym membership... Showing how to access services and knowing what's actually there."
P5	"Chris and me have started doing little park runs where I live...it's good because there's loads of people there...there's people motivating you and you know how far you're getting on – you're timed properly"
P7	"Trafford is different because we have a lot of open fields and facilities there waiting to be used...there's a football field, tennis courts...basketball court... One of the best running clubs in the country... An indoor facility at the Etihad stadium 25 minutes away... Brooklands Sports Club is there if people want to join in and play hockey..."
P8	it's...quite frustrating...there's a really good football pitch but in the summer they take away the goal posts...it doesn't make sense because people would go and play there... they just need to make the facilities more accessible, free and there all year round"
P10	"I couldn't really tell you what places do what...what places there are around Trafford. There could be more promotion...saying come and play tennis, it's free at Wythenshawe Park..."

Social media was suggested as an additional option to promote Trafford facilities and one participant commented:

"There's nothing on [social media] about...come and play tennis or swimming – it's all Juiceplus and those things" (P10)

Barriers outlined included takeaways, television advertisements along with the convenience of unhealthy foods:

"There was a vending machine where I used to eat all the time, which was a barrier"
(P10)

An additional barrier mentioned was the UK climate and weather conditions affecting mood and attitude to activity and healthy eating:

"Especially in summer, it's nicer to rustle up a salad so I think the weather affects my diet a bit" (P10)

"If I can do the gym 4-5 times a week in the dead of winter then I can do it in Summer"
(P3)

Theme 5: Perceptions of health risks associated with diet and activity level

Participants were generally aware that lifestyle choices now, impact future health:

“I think people live longer if they eat healthy food...if you eat healthy and look after yourself you have more chance of not getting ill, not having heart disease, strokes and live longer” (P4)

However, due to their age (all ≤ 33 years) this was not the most important motivator, especially amongst the student participants who mentioned that reducing health risks was not something that they particularly thought about:

“You just need to look at all the adverts and all the publications by...the NHS and stuff. It’s nearly all based on what not to do and perhaps there should be more emphasis on things you can do to lower your risk...for me personally, it’s probably the same for most young people, we feel like, oh, it’s not an issue for us. We’re only 21, 22, it’s not an issue for us, heart disease, we don’t need to worry about that for another forty years.” (P2)

Many of the participants expressed a need for the availability of relatable information on how to take small steps towards living a healthier life, rather than just negative messages of what not to do:

“There’s a lot of information out there but the issue is it’s very conflicting and confusing” (P6)

“I mean I know there’s information but maybe it could be broken down a little bit more, like, not dumbed down but more easy to digest...excuse the pun” (P10)

Discussion

To be able to implement successful health interventions and strategies it is fundamental to be able to understand how to motivate and encourage people to participate and adhere to advice and recommendations. This qualitative study therefore aimed to explore the facilitators and motivators, beyond simply identifying the barriers, and found common themes which related to complex personal, social and environmental factors, as well as the mixed perceptions of exercise and diet.

Results showed that self-confidence and body image were strong personal factors. Baruth, Sharpe, Parra-Medina and Wilcox (2014) found that feeling intimidated and embarrassed about their body were frequently mentioned by women as barriers to exercise. This study too, found that this was the case, not just in females but also males who had negative perceptions of their body image and felt intimidated in the gym setting. There was an even gender distribution of participants yet no major differences in attitudes or perceptions emerged and the major personal, social and environmental influences appeared to apply to both sexes.

Time and cost have been identified as key barriers in previous research, however results from this study suggest barriers are more complex and involve multiple aspects. Some participants even admitted they give 'time' and 'cost' more as an excuse rather than these actually being valid reasons. Laziness and lack of will power, and phrases such as "just can't be bothered", were talked about as genuine personal barriers, rather than simply lack of time.

Participants who found it easier to maintain regular activity and healthy diet seemed to perceive exercise and healthy eating as less stressful and had developed routines and consistency. Many suggested guidance in simple steps and setting realistic, achievable goals would help them overcome the problems of adopting and in particular, maintaining, a healthy lifestyle. Clear information about how these steps can positively impact their health was also regarded as beneficial.

Younger adults, especially student participants, discussed enjoyment as a motivator to maintain certain behaviours and being around friends or doing activities as a group was important.

One participant mentioned the influence of social media and how she believed more could be done to promote activities, local clubs or classes available locally.

Application for future health initiatives and programmes

Based on these interview responses, future strategies should consider programmes which encourage people to develop routines and persevere with healthier lifestyle choices to achieve the consistency needed for it to become a habit. More effective promotion of the many Trafford facilities is needed, in addition to developing ways to make them more accessible to people of all ages. Younger adults, particularly students, tended to be motivated by social activities with friends or as part of a team so clubs and group sports facilities could be subsidised to encourage greater participation.

Taking ownership and feeling a sense of achievement was an important factor for respondents, therefore providing guidance with clear simple steps may enable people to understand how to take positive steps towards achieving personal goals and maintaining a healthy lifestyle.

Limitations

The sample size was relatively small and the target of twelve was not reached, limiting the range of participant demographics. Participants were generally employed and the

study may have lacked insight from Trafford residents who are unemployed, as well as from lower socio-economical areas.

Conclusion

This study demonstrated that understanding barriers and motivators to a healthy lifestyle is complex and dependent on personal and social factors, as well as perceptions of health risks, exercise and diet. A common theme emerging within interviews was the need for routine and consistency. Participants who seemed to have fewer barriers and consistent motivation to be active and eat healthily, tended to be those who had developed a routine and had seen results or achieved personal goals.

Availability of facilities appears to play an important role in adoption of physical activity. Future health strategies should incorporate guidance and 'how to' resources as positive, simple messages of encouragement and advice can help individuals adhere to healthy living.

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Appendix A: Ethics Approval Letter



*Faculty of Medicine, Dentistry and Clinical Sciences
Research Ethics Committee*

frec@chester.ac.uk

25/05/2016

Alice Kelly
Braemar Drive
Sale

Dear Alice

Study title: *Exploring the barriers and motivators to physical activity and healthy diet in adults using interviews within Trafford Borough.*

FREC reference: 1181/16/AK/CSN

Version number: 1

Thank you for sending your application to the Faculty of Medicine, Dentistry and Clinical Sciences Research Ethics Committee for review.

I am pleased to confirm ethical approval for the above research, provided that you comply with the conditions set out in the attached document, and adhere to the processes described in your application form and supporting documentation.

N.B. Regarding the non-compression of age groups, having a diverse range within each group will make it difficult to draw meaningful conclusions against previous literature, let alone help inform policy. This is a point you may wish to discuss further with your supervisor.

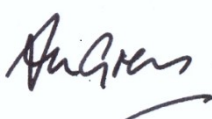
The final list of documents reviewed and approved by the Committee is as follows:

Document	Version	Date
Application Form	1	April 2016
Appendix 1 – List of References	1	April 2016
Appendix 2 – Summary CV for Lead Researcher	1	April 2016
Appendix 3 – Risk Assessment	1	April 2016
Appendix 4 – Participant Information Sheet [PIS]	1	April 2016
Appendix 5 – Consent Form	1	April 2016
Appendix 6 – Interview schedule(s) or topic guide(s)	1	April 2016
Appendix 7-8 – Validated questionnaire(s)	1	April 2016
Response to FREC request for further information or clarification	1	

Please note that this approval is given in accordance with the requirements of English law only. For research taking place wholly or partly within other jurisdictions (including Wales, Scotland and Northern Ireland), you should seek further advice from the Committee Chair / Secretary or the Research and Knowledge Transfer Office and may need additional approval from the appropriate agencies in the country (or countries) in which the research will take place.

With the Committee's best wishes for the success of this project.

Yours sincerely,



Professor Ben Green
Chair, Faculty Research Ethics Committee

Enclosures: Standard conditions of approval.

Cc. Supervisor/FREC Representative

Appendix B: Information sheet

Participant Information Sheet



**Exploring the barriers and motivators to physical activity and healthy diet
in adults using interviews within Trafford Borough.**

You are being invited to take part in a research study. Before you decide, it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with others if you wish. Ask us if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to take part.

Thank you for reading this.

What is the purpose of the study?

This research is being undertaken to investigate the perceived barriers to healthy lifestyle adoption and explore what motivates people to adopt and adhere to physical activity and healthy diet within the borough of Trafford, Greater Manchester.

A single one-to-one interview will take place between the participant and the researcher, to explore attitudes and perceptions relating to healthy diet and physical activity.

Why have I been chosen?

You have been chosen because you are a Trafford resident.

Do I have to take part?

It is up to you to decide whether or not to take part. If you decide to take part you will be given this information sheet to keep and be asked to sign a consent form. If you decide to take part you are still free to withdraw at any time and without giving a reason. A decision to withdraw at any time, or a decision not to take part, will not affect you in any way.

What will happen to me if I take part?

If you agree to take part in this research you will be asked to attend one interview with the researcher (lasting approximately 45 minutes) at a time which is convenient for you. The interview will begin with a short questionnaire to assess your physical activity level and eating patterns.

This will then be followed by a number of questions relating to exercise and diet with the aim of discussing potential barriers to physical activity and healthy eating and explore some of the factors that motivate you to be active or have a healthy diet.

The interview will be recorded using a digital audio recorder and then transcribed manually by the researcher. The researcher may also take notes during the interview. Your name will not be recorded, all responses will be anonymous.

What are the possible disadvantages and risks of taking part?

There are no disadvantages or risks foreseen in taking part in the study.

What are the possible benefits of taking part?

By taking part, you will be contributing to the development of research to investigate barriers and motivators to regular physical activity and healthy eating. When the study has been completed you will have the option to receive a summary of the findings, please contact the researcher (Alice Kelly) if you are interested in receiving this information.

What if something goes wrong?

If you wish to complain or have any concerns about any aspect of the way you have been approached or treated during the course of this study, please contact Dean of the Faculty of Medicine, Dentistry & Clinical Sciences, University of Chester, Parkgate Road, Chester, CH1 4BJ, 01244 510000

Will my taking part in the study be kept confidential?

All information which is collected about you during the course of the research will be kept strictly confidential so that only the researcher carrying out the research will have access to such information.

Participants should note that data collected from this project may be retained and published in an anonymised form. By agreeing to participate in this project, you are consenting to the retention and publication of data.

What will happen to the results of the research study?

The results will be written up into a dissertation for my final project of my MSc. Individuals who participate will not be identified in any subsequent report or publication.

Who is organising the research?

The research is conducted as part of a MSc in Exercise & Nutrition Science within the Department of Clinical Sciences & Nutrition at the University of Chester. The study is organised with supervision from the department, by Alice Kelly, an MSc student.

Who may I contact for further information?

If you would like more information about the research before you decide whether or not you would be willing to take part, please contact:

Alice Kelly. 1523444@chester.ac.uk.

Thank you for your interest in this research.

Appendix C: Consent form

Participant Consent Form



University of
Chester

Title of Project: Exploring the barriers and motivators to physical activity and healthy diet in adults using interviews within Trafford Borough.

Name of Researcher: Alice Kelly

Please initial box

1. I confirm that I have read and understand the information sheet for the above study and have had the opportunity to ask questions. ☐
2. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason and without my legal rights being affected. ☐
3. I agree to my interview being audio-recorded. ☐
4. I agree to take part in the above study. ☐

Name of Participant

Date

Signature

Researcher

Date

Signature

Appendix D: Interview structure and sample questions

Brief introduction and explanation of project.

Opportunity for participants to ask questions.

Section 1:

Mediterranean Diet Score test to assess the degree of adherence to a healthy diet.

Physical activity questionnaire to assess activity level.

(Followed by 2-3minutes break to allow time for researcher to collate scores.)

Section 2:

Qualitative questioning and discussion to explore attitudes and perceptions about diet and physical activity. Questions are for guiding the researcher, however the researcher may expand on questions and discuss answers further if needed;

If participant scores high (score = 36-55) or moderate (score = 21-35) on diet score then the researcher will ask questions such as:

- Is there anything in particular that motivates you to eat healthily?
- Is it important to you to have a healthy diet? If so, how important and why?
- Are there aspects of eating a healthy diet that you enjoy? Such as shopping for healthy options, cooking, meal times as a social occasion etc.
- Do you find it difficult to eat a healthy diet regularly?

If participant has a low diet score (score = 0-20) then the researcher will ask questions such as:

- How important do you believe it is to eat a healthy diet?
- Do you think that you currently eat a healthy diet?
- What do you believe to be the main barriers, if any, which may prevent you from having a healthier diet?
- Are there aspects of your current eating pattern that you enjoy? Such as shopping for healthy options, cooking, meal times as a social occasion etc.

If participant has a high or moderate physical activity score then the researcher will ask questions such as:

- Is there anything in particular that motivates you be active and/or exercise each week?
- Is it important to you to be active? If so, how important and why?
- Do you enjoy being active, taking part in physical activities and/or exercising? If so, what is it that you enjoy?

- Are you aware of the UK government guidelines recommending at least 150minutes of moderate intensity physical activity each week to stay healthy and reduce the risk of cardiovascular disease?

If participant has a low physical activity score then the researcher will ask questions such as:

- How important do you believe it is to be active each week?
- Are you aware of the UK government guidelines recommending at least 150minutes of moderate intensity physical activity each week to stay healthy and reduce the risk of cardiovascular disease?
- What do you believe to be the main barriers, if any, which may prevent you from being more active each week?

Appendix E: Mediterranean Diet Score Questionnaire

Validated questionnaire adapted from: Panagiotakos, D. B., Pitsavos, C., Arvaniti, F., & Stefanadis, C. (2007).

A diet score (range 0–55) has been developed that assesses adherence to the Mediterranean diet. For the consumption of items presumed to be close to Mediterranean dietary pattern (non-refined cereals, fruits, vegetables, legumes, olive oil, fish and potatoes) scores 0 to 5 for never, rare, frequent, very frequent, weekly and daily consumption were assigned, while for the consumption of foods presumed to be away from this pattern (red meat and products, poultry and full fat dairy products) scores on a reverse scale were assigned.

The proposed Mediterranean Diet Score may be useful in detecting individuals prone to the development of nutrition-related health conditions and cardiovascular disease.

Modified Mediterranean Diet Score Questionnaire:

		Frequency of consumption (servings/week or otherwise stated)					
How often do you consume							
Non-refined carbohydrates (whole grain or multigrain bread, oatmeal, brown pasta, brown rice, etc)	Never	1–6	7–12	13–18	19–31	> 32	
	0	1	2	3	4	5	
Nuts	Never	1–4	5–8	9–12	13–18	> 18	
	0	1	2	3	4	5	
Fruits	Never	1–4	5–8	9–15	16–21	> 22	
	0	1	2	3	4	5	
Vegetables	Never	1–6	7–12	13–20	21–32	> 33	
	0	1	2	3	4	5	
Legumes (peas, beans, peanuts, lentils etc.)	Never	< 1	1–2	3–4	5–6	> 6	
	0	1	2	3	4	5	
Fish or seafood	Never	< 1	1–2	3–4	5–6	> 6	
	0	1	2	3	4	5	
Red meat , hamburgers and other meat products	≤ 1	2–3	4–5	6–7	8–10	> 10	
	5	4	3	2	1	0	
Poultry (chicken, turkey, rabbit)	≤ 3	4–5	5–6	7–8	9–10	> 10	
	5	4	3	2	1	0	
Commercial sweets/pastries (e.g. processed snacks, chocolate/biscuit bars etc)	≤ 7	8–12	13–19	20–25	26–30	> 30	
	5	4	3	2	1	0	
Use of olive oil in cooking (times/week)	Never	Rare	< 1	1–3	3–5	Daily	
	0	1	2	3	4	5	
Alcoholic beverages (units per week) <i>1-1.5 unit = single measure of spirit</i> <i>2 units = 175ml glass of wine</i> <i>2-3units = pint of lager/beer</i>	< 5	5-7	8-10	11-13	14-16	> 16	
	5	4	3	2	1	0	

Appendix F: International Physical Activity Questionnaire (IPAQ)

Short Form and scoring system

The International Physical Activity Questionnaire (IPAQ) will be used to score the participant's weekly level of activity. The questionnaire was taken from:

www.ipaq.ki.se

The document 'Guidelines for data processing and analysis of the International Physical Activity Questionnaire (IPAQ) – November 2015' provides detailed instruction on how to carry out and score the questionnaire. This can be found here:

<https://docs.google.com/viewer?a=v&pid=sites&srcid=ZGVmYXVsdGRvbWFpbnx0aGVpcGFxfGd4OjE0NDgxMDk3NDU1YWRIZTM>

The categorical scoring system will place the respondent in a 'low', 'moderate' or 'high' category of physical activity level.

If the participant scores 'low' they will be asked questions related to barriers in section 2 of the interview (Appendix 6).

If the participant scores 'moderate' or 'high' they will be asked questions related to motivators in section 2 of the interview (Appendix 6).

Please see next page for full questionnaire followed by the scoring system.

INTERNATIONAL PHYSICAL ACTIVITY QUESTIONNAIRE

SHORT LAST 7 DAYS SELF-ADMINISTERED FORMAT

FOR USE WITH YOUNG AND MIDDLE-AGED ADULTS (15-69 years)

The International Physical Activity Questionnaires (IPAQ) comprises a set of 4 questionnaires. Long (5 activity domains asked independently) and short (4 generic items) versions for use by either telephone or self-administered methods are available.

The purpose of the questionnaires is to provide common instruments that can be used to obtain internationally comparable data on health-related physical activity.

Background on IPAQ

The development of an international measure for physical activity commenced in Geneva in 1998 and was followed by extensive reliability and validity testing undertaken across 12 countries (14 sites) during 2000. The final results suggest that these measures have acceptable measurement properties for use in many settings and in different languages, and are suitable for national population-based prevalence studies of participation in physical activity.

Using IPAQ

Use of the IPAQ instruments for monitoring and research purposes is encouraged. It is recommended that no changes be made to the order or wording of the questions as this will affect the psychometric properties of the instruments.

Translation from English and Cultural Adaptation

Translation from English is supported to facilitate worldwide use of IPAQ. Information on the availability of IPAQ in different languages can be obtained at www.ipaq.ki.se. If a new translation is undertaken we highly recommend using the prescribed back translation methods available on the IPAQ website. If possible please consider making your translated version of IPAQ available to others by contributing it to the IPAQ website. Further details on translation and cultural adaptation can be downloaded from the website.

Further Developments of IPAQ

International collaboration on IPAQ is on-going and an ***International Physical Activity Prevalence Study*** is in progress. For further information see the IPAQ website.

More Information

More detailed information on the IPAQ process and the research methods used in the development of IPAQ instruments is available at www.ipaq.ki.se and Booth, M.L. (2000). *Assessment of Physical Activity: An International Perspective*. Research Quarterly for Exercise and Sport, 71 (2): s114-20. Other scientific publications and presentations on the use of IPAQ are summarized on the website.

INTERNATIONAL PHYSICAL ACTIVITY QUESTIONNAIRE

We are interested in finding out about the kinds of physical activities that people do as part of their everyday lives. The questions will ask you about the time you spent being physically active in the **last 7 days**. Please answer each question even if you do not consider yourself to be an active person. Please think about the activities you do at work, as part of your house and yard work, to get from place to place, and in your spare time for recreation, exercise or sport.

Think about all the **vigorous** activities that you did in the **last 7 days**.

Vigorous physical activities refer to activities that take hard physical effort and make you breathe much harder than normal. Think *only* about those physical activities that you did for at least 10 minutes at a time.

1. During the **last 7 days**, on how many days did you do **vigorous** physical activities like heavy lifting, digging, aerobics, or fast bicycling?

_____ **days per week**

No vigorous physical activities

Skip to question 3

2. How much time did you usually spend doing **vigorous** physical activities on one of those days?

_____ **hours per day**
_____ **minutes per day**

Don't know/Not sure

Think about all the **moderate** activities that you did in the **last 7 days**.

Moderate activities refer to activities that take moderate physical effort and make you breathe somewhat harder than normal. Think *only* about those physical activities that you did for at least 10 minutes at a time.

3. During the **last 7 days**, on how many days did you do **moderate** physical activities like carrying light loads, bicycling at a regular pace, or doubles tennis? Do not include walking.

_____ **days per week**

No moderate physical activities

Skip to question 5

4. How much time did you usually spend doing **moderate** physical activities on one of those days?

_____ **hours per day**
_____ **minutes per day**

Don't know/Not sure

Think about the time you spent **walking** in the **last 7 days**. This includes at work and at home, walking to travel from place to place, and any other walking that you have done solely for recreation, sport, exercise, or leisure.

5. During the **last 7 days**, on how many days did you **walk** for at least 10 minutes at a time?

_____ **days per week**

No walking

Skip to question 7

6. How much time did you usually spend **walking** on one of those days?

_____ **hours per day**

_____ **minutes per day**

Don't know/Not sure

The last question is about the time you spent **sitting** on weekdays during the **last 7 days**. Include time spent at work, at home, while doing course work and during leisure time. This may include time spent sitting at a desk, visiting friends, reading, or sitting or lying down to watch television.

7. During the **last 7 days**, how much time did you spend **sitting** on a **week day**?

_____ **hours per day**

_____ **minutes per day**

Don't know/Not sure

This is the end of the questionnaire, thank you for participating.
IPAQ scoring system:

Categorical Score- three levels of physical activity are proposed:

1. Low

- No activity is reported OR
- Some activity is reported but not enough to meet Categories 2 or 3.

2. Moderate

Either of the following 3 criteria:

- 3 or more days of vigorous activity of at least 20 minutes per day OR
- 5 or more days of moderate-intensity activity and/or walking of at least 30 minutes per day OR
- 5 or more days of any combination of walking, moderate-intensity or vigorous-intensity activities achieving a minimum of at least 600 MET-minutes/week.

3. High

Any one of the following 2 criteria:

- Vigorous-intensity activity on at least 3 days and accumulating at least 1500 MET-minutes/week OR
- 7 or more days of any combination of walking, moderate- or vigorous-intensity activities accumulating at least 3000 MET-minutes/week

Appendix G: Interview transcripts

Participant 1

Is there anything in particular that motivates you to eat healthily each week?

I look at myself and think I look fat and bad. So I think, I look bad, so I decide to go on a healthier programme or diet. It's mainly body image, not just weight loss I just want to look better. I feel that sometimes on a personal thing relationship wise, people won't look at me

the same because I don't have that body. They often judge by appearance and how you look, so that's what motivates me to want to change and eat healthier. I want to change how things could be with me and my life. Plus I think I do eat badly sometimes, I just don't want to have that bad lifestyle.

Do think health risks have an impact on you making healthier food choices?

Yeah, it's important to eat healthily. I had a bad illness in the past, not linked to diet or food, but because I had that, it did make me think about diet a bit, like improving my diet might help in the future.

Are there aspects that you enjoy?

I like cooking. I do like making something from scratch so healthy eating will be making it from scratch rather than putting it in the microwave so yeah generally I prefer to try and do that. I don't particularly enjoy the shopping part or choosing what to buy. I mean I do like to cook for other people so if they like it and it's healthier then yeah.

Do you find it hard or stressful to shop in the supermarket for healthier options...?

I think it's hard to find healthy foods as everything is all mixed together and healthier food does seem more expensiveIt's harder to buy it but it's more rewarding when you do.

So in terms of barriers to eating healthier, what are the main things?

It's easier not to. So if I work all day rather than cook something when I get home I can quickly put something in the oven which isn't as healthy, it's the time basically and convenience. Cost doesn't really make that much of a difference. I'll get home sometimes and only have half an hour to eat something so I'll cook it quickly and put something in the oven and it's quicker.

Have you ever been given cooking recipes, information or links to websites etc for making nutritious foods?

I've got a book on healthy meals, I have actually read it and used it twice – the big fat hairy bikers cook book. It's good, it tells you everything like the calories and portion sizes, and health stats for each portion. I do try and count calories sometimes, I have a tracker – myfitnesspal so I did calorie count. When I go to the gym I calorie count, when I'm not going in the gym I don't.

So do you feel like you're more motivated when you go to the gym regularly, to also improve your diet and nutrition too?

Yes. 100% motivated to eat more healthily. When I'm not going to the gym, I'm not, I kind of lose the overall motivation.

Is there anything in particular that motivates you to be active or exercise each week?

The same as the healthy eating, just the way you look. If I feel bad and don't look great then I'll want to go to the gym. But once I've got to the gym I'm motivated to exercise because I feel

better in myself that I've been and the next day I'll want to go again. I'll be in a little routine, but then that can easily stop.

What is it...?

Well too tired one day to go, and then the next day I'll think oh I'll not bother getting up early in the morning to go again and then I'll go back into the bad routine which is easy to not do anything. It's easier to not do anything than it is to do something.

What type of exercises do you do?

For me its mostly the gym or walking. I walk a lot. So if I go home from work I choose to walk instead of getting the bus. ...I get off at the Trafford centre and walk, which takes an hour, but that's instead of getting the bus directly to my house in 20 minutes. But I always walk it.

Why...?

I feel that it's better for me to have that sort of exercise each day. Even though it's not a big exercise I feel better for doing that.

Do you know about UK Government guidelines recommending at least 150mins of moderate intensity physical activity each week?

No. Should I have done? (laughs) Well if that's the government guidelines maybe more should be done to get the information out to everyone.

Do you think it's important to be active each day?

Yeah it is important, I just don't think people or myself look at it like that every day, like I don't think each day oh I should do some exercise because I haven't done any today.

So generally, you've highlighted body image and body confidence as a main motivator to exercise and eat healthily?

Yeah massively.

And it's less about potential health risks when you're older?

Yeah I think for me personally it's about how I look and feel right now. Obviously it might help in the long run but that's how I look at it right now.

Do you enjoy being active or taking part in physical activities?

Yeah, when I'm doing it yes.

Do you play sport?

When I was younger I played football a lot, and enjoyed that. Er, now I do some sports, it's not very physical but it's still active.

How many times a week to you play that sport?

6 times during the season.

Do you get a lot of enjoyment from that?

Yes. It's social, like we don't drink all the time but we have a good time and get to know people there, it's better than just sitting at home staying in. But it's only for 7 months a year, so for 5 months I'm not doing it. I also like the competitive aspect of it as well. I like to try and improve each week and win tournaments. I can't play something if it's just for fun.

Compared to something like the gym...?

Yeah but how I look at it is that when I'm in the gym, I try and set myself a target to achieve like weight loss or a certain look, by a certain time.

So if there's any barriers when exercising each week it would be..

It's myself really, just being lazy. Time is an excuse, it's me being lazy just thinking that I can't be bothered.

So time and cost isn't the key thing?

I think its laziness and also will power. You need the will power especially with the gym, to keep doing it. And you might be in the gym next to someone who looks like a ripped guy and you're there with flab hanging out. Makes you feel **** , not good, awful.

So rather than motivating you to keep at it, it really demotivates you, it's a bit disheartening?

Yeah, when you can see someone who can lift weights ten times as big as you and you can't, then yeah, you wouldn't go back to those weights again. They should do a gym for fat people, a gym for weak people and a gym for people who are good.

Specific gyms where you're around people with similar goals?

Yep.

End of interview

Participant 2

Is there anything in particular that motivates you to eat healthily each week?

To be honest it's so that all the exercise and gym training that I do is worthwhile. To do one without the other is kind of pointless, so if I was to go to the gym and not eat healthy I'd be wasting my time. Also it is partly an aesthetical thing, body image and the fact that when I started I noticed, you know, a change in my body then you kind of want to keep that going, you want to put on more muscle and for me it's a lean muscle target. So the more lean muscle the better, also the gym when you reach certain weight lifting goals so a certain weight, then

you kind of want to do everything you can to go further and better, so eating healthy is part of that so you know you will feel better in the gym.

So generally eating healthy for you is to do with your general routine it goes with your exercise routine and also body image, helping you to get leaner? Do you look at it also having an impact on long term health effects in the future?

Yeah I think also the fact that since I've changed my diet and started eating healthy, training in the gym, I don't get as ill so much, I don't get as many colds and the flu as much. And my immune system is much much better, and I kind of think well if that's the case now, if things such as colds and flu, like minor illnesses, then if you keep that going then your chances of having... I mean it's also the fact that I know people who are in their late 40s and 50s who exercise regularly, eat healthy, and compare them to people of the same age who don't and you notice the problems with them and illnesses, so it kind of speaks for itself really. And I think that with me this is not just a phase, it's all about what I carried on going with or not dropped so like as soon as I stop eating healthy for a short time, I know that I get ill or don't feel as good.

Are there any aspects of eating a healthy diet that you enjoy? Such as shopping for healthy, options, cooking, meal times as social occasions ...?

Yeah it's more challenging definitely to eat healthy but it's something that is quite interesting. It's something that's quite new so I'm used to, well...I've spent a lot of time in catering or having meals provided for me so I don't have as much control, even like as a kid growing up you kind of eat what your parents cook for you which is good for us. But then when you suddenly become in control of what you eat it can become quite like a sign of independence, like being able to make decisions and when you go to the supermarket it's not just a case of what's cheap and easy its quite interesting, I think if you have an interest in it, it definitely helps. But then just experimenting is quite good, so trying new things, like I say it's a social thing so you eat healthy its quite challenging but sometimes you ask people oh what do you eat with this or what do you have, so I think people exchange healthy eating advice more than unhealthy eating advice.

What about your friends or people you live with? Do they eat quite healthy and if they do or don't has that influenced you in any way?

No, not really because we all sort of eat individually, some do some don't, some cook together. But I try to eat healthy and diet has been a big thing for me the past few years so my diet has been the same. But I know some of the guys I live with, their meal choice is based on time and convenience. A lot of people fluctuate, certain people seem to go through periods of eating pizzas and not necessarily healthy foods and then suddenly they think oh I should be eating healthy so they try to eat better, and it's always a kind of short term thing until it's the point where it's not

So do you think will power is important then?

Yeah the key thing I've found is that I've learnt from the start it's about consistency so both in the gym and with diet it's about consistency that's the key to everything. So because of this fixation in the fitness world, with the newest craze or diet or exercise to do, people are always changing. But the only way a workout programme or diet works is if you stick with it and be consistent. So the biggest thing that I found is that if you've sort of had a little bit of planning at the start, that's consistent with your diet, it just becomes second nature. So now when I go to the supermarket I don't really think as much about what to buy as I already know what I need to buy. It's a lot easier after doing it for a couple of years, knowing what's good and bad, you almost have blinkers on and you don't even acknowledge the bad food. There's certain parts of the supermarket I don't even ever see as I don't go to the crisps or sweets aisle. I genuinely have not bought sweets in probably about a year, not out of I have to walk past quickly and try not to look at them and self-discipline, I just don't, I'm just not interested or don't have the urge for them. It's not part of my routine. My routine is based on the foods I buy regularly and what I eat, and because it seems to have worked.

Has there been a time in the past few years you feel like you might have been knocked off track or you were tempted?

Oh yeah, I've noticed that it's always been when I've had stress like exams, or it's been a time based or stress based situation i.e. exams is pretty much the main one, that's also followed by any time I'm not in control of my meals and it's purely convenience and you know ease of time really. And then there's also times when you kind of feel you've been so good for so long that one day off isn't going to completely ruin everything. But then that's a self-discipline thing, knowing that it's one day and it's not going to be more... like last week I had a milkshake, full of carbs and this nasty big whipped cream, ice cream, huge calorie filled milkshake and I knew that first of all it was a one off and second of all the next day in the gym I'd work twice as hard and burn myself out to make up for it. So I'm aware of you know well I'm in control, so there's no place where I've fell out of control. I've always been aware of the situation if there have been exams or I've been stressed or something that's caused me to do this. I've never suddenly realised through 3 weeks of bingeing that I need to sort myself out that I've been eating rubbish, I've always been aware of it.

Finally what do you think, from your perspective, are the main barriers for other people who might struggle with maintaining healthy eating, watch calories etc?

I think there's quite a few but from seeing my friends and people, and ones that I've had to overcome in the past or even now still find challenging, the biggest one is routine, consistency, commitment. I think that's the thing that most people lack when it comes to fitness and diet because you reach a point after starting off where you kind of hit a wall, once you get past the wall it no longer becomes a chore and you start to enjoy it. The people who go to the gym because they enjoy it and want to go, as opposed to feeling like they have to go. It's getting to the point where you change from feeling that you should go or have to go, for it to become a routine. And I think that's the biggest thing, if you get over that then everything else follows because you're motivation is up and you don't mind putting up with other things e.g. cost, like healthy food costs more. I mean there's ways around it to find cheaper foods, but generally it

does cost more because that's the way it is. Gym memberships cost money, exercise gear all that stuff all costs, which puts people off, they think I can't afford to do all this stuff. But in reality all you need is a pair of trainers and somewhere to run or do press ups, push ups, sit ups. Because I'm used to powerbase gym - for 3 years I trained there at the best strength and conditioning gym in the country, and now I'm stuck in a tiny little high school type gym which has old knackered weights machines and restricted weights base, old equipment.. .but it's everything I need and I've been in the best shape now than I've ever been.

Because you've got that foundation knowledge already of what work outs for you?

Yeah that's the thing, it's the psychological side so the knowledge like knowing what to do and how to do it... that confidence also, confidence in the gym is a big one. One that is the reason people may not get to that second phase of enjoyment because they go to a gym and they aren't comfortable enough or know enough to do things on their own or maybe not confident to ask someone so then that's it, they don't go back. Feeling anxious, slightly scared but its intimidating, in a gym sometimes, for different reasons, maybe for girls the imagine of them doing something wrong, or with guys not wanting to embarrass themselves, may feel intimidated by other guys. Girls can feel intimidated by guys because they may feel that it's a social scene where they need to look the best and may think guys are looking at them. They don't want to do anything that may embarrass them. So the social scene at the gym can get to someones confidence who may not be experienced. You can tell when someone walks into the gym and you can tell it's their first time there but you know that we've all been there and it's better to see someone go and try it and make a fool of themselves than giving up before they go.

Do you think having separate gyms for people of different abilities or targets?

Well I don't really agree with that because the whole psychology behind fitness how it's about motivation and what motivates a lot of people is seeing other people that they want to be like. As in you go to the gym and well for me this was extreme as I walked in and would see team GB and Olympic power lifters, and obviously I'd never be up to their standards but I'd think wow that's cool that they can do that or lift that and you watch them doing stuff and that's genuinely how I learned. I never had a personal trainer, and yeah I got a lot of stuff from friends but watching people is one of the biggest learning curves in the gym. Watching what people do, if you need to ask then ask people, but generally just observing people. So I think that separating people would be wrong because the people who are struggling don't know the benchmark.

It could be too extreme for them though? Working around people with similar goals and ability may be less stressful for them rather than walking in and seeing someone who is years into a training program and thinking there's no way I can be like that?

Well that's where I think sessions would work, like putting people together in group sessions organised by gyms I think are really good. It doesn't have to be in a studio or whatever, just a personal trainer leading people around that gym, and I think the social side kind of is a big part

if you have someone to go with, it helps at the start definitely. Going to the gym on your own is quite daunting, well now I prefer it, but that's just because I know exactly what I'm doing I'm in my own zone the whole gym sessions. Whereas to start with, I didn't want to go unless someone else was going, I hated the gym on my own. I think if everyone had someone to go with at the start then more people would carry it on. It's less intimidating and scary, if you do something wrong you're with friends so it's ok and you don't get embarrassed. Just someone to talk to as well, might be able to help and work out what's the best thing to do. You're more likely to speak to a personal trainer if there are 2 of you, so I think yeah it's easier going with someone, that's a big thing, less intimidating.

What is it in particular that motivates you to be active and exercise each week?

Probably the way it started was with rugby, so that's what got me into fitness,...so I felt that it was a sport related...I wanted to get stronger so that I was a better rugby player but then what that does is starts you on that kind of path when your personal goals come into it then. So you think that since I've been going to the gym I can lift this weight now so then you start thinking, well, I want to start lifting the next weight up, then the one after that. Then it becomes less about that...when I stopped playing rugby it was more about my own personal goals. I knew I had less body fat and I was stronger, leaner and it became about keeping on being like that and not letting that drop. It's not so much about getting stronger and stronger and stronger because I'm happy now with the level I'm at. For me it's about not letting the level that I'm at, drop. I don't want to lose strength or the muscle I've got and that is the, em, not psychological fear, but that's what motivates a lot for me. It's not so much what I want to do more what I want to avoid. I get a little bit paranoid after say, when I get injured – I used to hate to get injured, not because I couldn't play but because I felt I was losing ability, losing strength, muscle. I mean in reality it takes a while to lose a lot of the muscle you have put on but it's a physiological thing. I think that after 3 days of not going to the gym that suddenly my six pack will disappear or something like that. It's stuff that in reality isn't that true but I would just go to the gym and work twice as hard to make sure I don't lose anything. So I think that's the sort of psychological thing that motivates me. The physical target for me-I've reached. I'm happy with the weight I'm at and the weights I can lift, happy in my ability and strength levels – it's just keeping that going.

Do you think it's also important and a factor for being active each week and for good nutrition, to reduce your risk of future health risks? Obviously exercising each week can reduce your risk of developing cardio vascular disease and diabetes. Does that ever factor in to your thinking – if I stopped exercising it might affect my health in the future or is it just that you don't want to lose your routine in the gym?

The thing is that I don't really know enough about illnesses and all that kind of stuff. What does cross my mind fairly frequently is that I wonder how long I can keep this up for and when it becomes less about sort of fitness and body image and more about health. Because the people I used to sort of look at were people like Mr Azzopardi, the teacher who was a weight lifter at my age and everything was about strength and physical image and all that kind of stuff and then at the age of sixty, because of his physical fitness, he maintained his fitness all the way

through. He is probably a lot fitter than most of the guys his age and he's not bothered about body image any more or how much he can bench or lift but, you know, he's a lot healthier and not been bothered about heart disease, or anything like that. So I think it's things like that that do come to mind when you think at what age and what point does body image take a back seat and health becomes the motivator?

Alice talks about her physiology modules and what she has learned.....what a massive impact exercise and being active can have on future health. Do you think there is enough information out there and resources explaining even slightly scientifically, what impact being inactive actually has?

I think what's out there at the moment is all about the things you shouldn't do. There's too much emphasis on don't smoke, don't drink, don't eat processed food...don't do this, don't do that..So people don't do that, which is one thing but that's only half the problem. The other part is, do this, do that. It seems that if you are not doing all the wrong things, then that's all good. Which is fair enough – you're not making your risks higher – but equally, it should be there are lots of things you can do to lower your risk. You just need to look at all the adverts and all the publications by, you know, the NHS and stuff. It's nearly all based on what not to do and perhaps there should be more emphasis on things you can do to lower your risk to a more normal level. I think for me personally, it's probably the same for most young people, we feel like, oh, it's not an issue for us. We're only 21, 22, it's not an issue for us, heart disease, and we don't need to worry about that for another forty years. A lot of these things, like exercise help prevent and reduce the chance until you get to a certain age and that's when you start worrying about it. Whereas the whole idea is if you do start worrying about it now, that age will go up and up and up til eventually you might not have to worry about it so rather than thinking about, I might get heart disease at forty five, it becomes the same likelihood at sixty five if you exercise and eat right. Cos I know there's some software, I don't know what it's called, but doctors have it and they used it at BA, the company doctor, to show me my risk of heart disease now at 21 – it was 0.02 or something incredibly low, based on physiological factors and height, weight, non smoker and all that kind of stuff. Then one by one he changed the factors so he said I'd put on a kilo a year, which doesn't sound a lot but if over thirty years, that's thirty kilos. Then he said, and maybe you know, aged fifty and thirty kilos heavier my risk went up a lot. Then he said maybe you drink a little bit more, then added some of these factors, one by one. Then before you knew it, my chance of getting heart disease was high. And that was quite a thing to see it physically in front of you – it's quite a shock and that's what people don't realise. You don't have to do a huge amount of bad things for these things to have this effect. But equally, they don't need to do a lot to reduce it. So exercise for a short amount, eating a little bit healthier etc

Are you aware of the UK Government guidelines recommending at least 150mins of moderate intensity physical activity each week to stay healthy and reduce the risk of developing cardiovascular disease? Have you heard of that before?

I had heard of it but, like I say, there seems to be a lot of different things going on about the level at which you need to have raised your heart rate each week - like three times a week raise your heart rate by an amount. I think there's a lot out there that needs to be simplified a bit more and the sort of definitions. Like you said about 150mins of strenuous exercise, or whatever it's called, ..who knows what moderate intensity is? For me, my moderate intensity is probably vigorous for a lot of people and that's all just relative and it's one person's interpretation of moderate. I was aware of it but I heard so many different things that I'm not too sure. There's a lot of people saying you should do this, you should do this, or that - but what about how to do this and how to do that? Em, it's one thing to say do moderate intensity for 150 mins, well, how? Or in diet, they say, you should have so many nutrients and this amount of calcium or protein and fibre - it needs to be in relatable terms like, say by having this or eating that. I think where it's coming from is a big factor. People just starting out are very gullible and will believe anything they read in a men's' health magazine or the equivalent women's magazine or online or videos with celebrities. I could tell you a hundred things that come out in men's health magazines or online but I could tell you barely anything that the NHS have said and that's all to do with the platform and the way these messages are coming out. So that's why I think it's.. who endorses schemes by the NHS..you just want to know the information you're getting is correct. I used to read out things from the magazine that was delivered to the house, saying to Tom and Cam, rubbish, rubbish, rubbish. I'm not a trained expert but even I know that half the stuff is nonsense. It's just to sell stuff, but I could give that to someone going to the gym for the first time and they'll believe absolutely, every word of it. So the challenge is to battle the commercial side of it. The fitness and gym industry and healthy eating is divided by the sort of good intentions of the NHS and organisations who genuinely want to improve health then the companies who want to exploit gullible people to make money. That's the biggest problem with the industry at the moment and the challenge that the NHS have got, I think.

Do you choose activities because you enjoy them or are you doing them because you think they will improve your health or lean, muscle targets?

I think it's a balance of both, there's no point in doing something you hate all the time because then it goes back to being dull. I enjoy weight lifting but then there are certain exercises I don't enjoy like I'm not a fan of certain muscle group exercises but I know I have to do them and if I were to just do stuff I didn't enjoy then it would go back to being a chore and that's partly because I now have enough knowledge to plan my own work outs. I work out what I want to do and enjoy whereas a lot go to the gym to do things that are horrible and they don't like but they think that's the only way. There are millions of options in terms of how you can train and what you can do but equally I couldn't just stay in the gym seven days a week, that's why I go out and do runs and sessions. It's not that it's enjoyable; it's just a more interesting way of training and one that stimulates the mind. Because I mentioned earlier that one of the biggest things for me is consistency and a routine but equally a routine can become monotonous and it can become mundane and boring then loses its effect and the only way to combat that is to do something different and change it. That's why the way I exercise now isn't the same as I did six months ago. It's similar but I changed the way I do things and do things in a different order

because when your mind becomes bored with it you no longer get the same satisfaction and enjoyment from it. As soon as you start that, you know, losing that motivation and physical drive it's just the slippery slope. So it's, I'm not saying no matter what I choose I'll enjoy it, you have to make a conscious effort to do things you enjoy. Except there are things you're not always going to enjoy but you do them but then work out what it is that you do enjoy.

What motivates you and stimulates you to keep going will be different to what motivates other people...some might need targets, some it's something that's sociable and enjoyable.

It's individual goals and requirements that are key..no one size fits all. This is why I've never really followed a training programme just taken from a book. What I do is read six or seven or eight training programmes and pick the bits that I like. That's why quite often friends of mine, especially girls like Hannah and Jess, when I used to show them stuff in the gym they'd say 'where did you read that work out or where did you find that stuff?' Well from ten different places because that's what I wanted. Somewhere along the line, the guy who made each workout had to construct it from somewhere, they don't just exist. They did it by bits so the thing is, working out what your goals are and working out the best thing for you to achieve them is what suits you personally. Definitely.

Anything else in terms of what motivates you or the key barriers – examples identified by the NHS have been time and cost regarding both nutrition and exercise?

Those are the two things and em, I think for example, Pure Gym they've taken that one quite well in that those two barriers they've used to... they've said we're going to get rid of all the stuff you don't need in the gym and the stuff that costs money, like the pools and shops and extras and cafes and all that rubbish and give you exactly what you need –available 24 hrs, that way the time barrier is addressed because you can go whenever you want. And the cost is addressed, with low monthly rates, like the equivalent of Ryanair. I think that's clearly shown in that they are the fastest growing gym in the UK. It helps reduce the barriers that are the main reason stopping people going. Time is a factor of lifestyle and career and like for me, in the future, I'm a little bit worried that the routine I'm used to is one that I won't be able to keep up and that's not a personal choice. It's not something that I'll decide to stop doing but something I'll have to accept as part of my lifestyle and part of my job.

When that happens how do you think you'll find the motivation to keep active?

It's basically what motivates me now that I won't want to lose the progress that I've made and I think fortunately for me I'll be in a position where I have a high level of motivation going in to it. There are guys who've been in the job for five or six years and think suddenly I need to get into the gym and improve my fitness and get into healthy eating but they have to motivate themselves in that sort of way. Whereas right from the start, I want to make sure I don't let my training drop or my healthy eating drop so I'm going into it with a high level of motivation rather than trying to start from scratch. But that is not a case for me of physical barriers, the sitting down, the long periods of time, the food, the travel...I know for a fact it will be

possible... I've seen a lot of pilots on Instagram who do that, who bring their own food to work rather than in-flight meals, the first thing they do when they get to a hotel is go to the gym, on days off they do training. It's more difficult but then I thought what I do now was difficult three years ago but now it's my routine and I know that in three, four years time that will be my routine. It might be more difficult or more of a challenge but it will just be my routine. And that's the whole thing that routines are, difficult at first but the nature of them means after you get used to them, they get easier. Choices aren't the same for everyone so there might be times when it's just not practical. For the sake of your health then perhaps a rest is better for your health than going to the gym. It's a factor of the situation as in, the situation I'm in now I can do everything I need to do to stay in the shape I'm in now. In three years time the situation physically will not enable me to be in the same shape. I'll still work the best I can and that's working out what is the best you can do given the circumstances so I'll not always be in the same shape but it's just accepting it.

End of interview

Participant 3

Is there anything in particular that motivates you to eat healthily each week?

Weight loss. I don't want to put on weight. I want to try and lose the weight that I've put on by eating unhealthy.

Do you think it's important to have a healthy diet?

Yeah, as I've got older I'm more concerned about having a more balanced diet.

Are there any aspects of eating a healthy diet that you enjoy? Such as shopping for healthy, options, cooking, meal times as social occasions etc?

Yeah, it makes you feel good when you do your weekly shop and buy healthy foods. So planning ahead is important.

Do you ever find it difficult in the supermarket to choose healthy options?

No I'm not too bad in the supermarket actually, but it's when you get to other places like restaurants [laughs] that's when it's difficult – the food in restaurants, because you're paying a lot more for the food you feel like you want to get your maximum enjoyment out of it. In supermarkets I can buy healthy foods, and when you do eat healthily and go to the gym and things, you do feel a lot better inside yourself I would say. You'll always enjoy it if you're being very, very healthy and then you have something unhealthy you don't really enjoy it, you feel really bad after you've had it, but if you're being unhealthy then you kind of enjoy the unhealthy food.

So do you find it easier to go off track with your healthy eating if you've had some unhealthy food?

Its boom and bust, it's either very, very healthy or very, very unhealthy - there's no mid ground really with me.

And then would you find it difficult getting back on track if you've started eating very unhealthily?

If you can do about 3-4 days then you'll feel the benefits of eating healthy and then you can be back on track.

What do you think are the main barriers for you in maintaining a healthy diet?

You've got to be able to prepare for it, eating healthy, so doing weekly shops and getting the right food in you need to plan, but once you have the food in its a lot easier. Also social pressure, work and everything, if everyone else is eating unhealthy food and things like that, or if you go out and have a few drinks then unhealthy food sneaks in.

Do you feel any social pressures to join in with eating unhealthier options at work or going for drinks etc?

In work I'd say so yeah. Not everyone has the same goals. Some people are lucky they can eat what they want and not put on any weight.

What is it in particular that motivates you to be active and exercise each week? For example going to the gym each week?

Just because it is about losing the weight and keeping it off, and if you know you have a big weekend coming up then you know you might slip off the wagon in terms of how much you

might drink and the food you might have so things like that, but then its more for me inside, like you get a good feeling when you come out of the gym.

Do you feel there's any stress or pressures when you go to the gym?

If it's cardio it's fine I just do what I do, but I don't like doing weights in the gym.

What's the reason for that?

I don't know, it's just there's usually a few meatheads [laughs] or things like that, it's just kind of I don't feel comfortable doing weights in the gym on my own, I don't mind doing it but again you just don't what you're doing as much, like if you go on a treadmill or rowing machine, cross trainer, it's all set up for you really and you can do different programmes. Whereas with weights it seems like there's a right way and a wrong way of doing things, and it kind of feels like you can waste loads of time in there doing the wrong thing or the wrong technique whereas on a bike or running machine it's a lot simpler I find.

Do you think if you had your own programme then it may be easier?

Yeah definitely, it's not knowing what to do that's the problem.

So do you find that if there are some people there that seem to be really advanced, have been training for years, do you feel put off by that or do you feel more motivated?

[Laughs] No it puts me off, I mean I'm quite competitive on the cardio side; I do want to try and beat myself each time. I think that's the only thing that keeps me going to the gym again and again, over a sustained period of time, not just doing it for like 3-4 weeks or before you go on holiday. If you're doing it over a year, 18months to 2years, then it's that sort of inbuilt competitiveness, whether it's in the gym or going out running on the road and things like that. Beating your time each time, having targets. Like if you're on the rowing machine, cross trainer, bike – trying to beat your personal best on one of the 3 of them each time you go, that's sort of my drive, it drives me on anyway.

So do you set yourself targets or personal goals to achieve in a certain amount of time?

Yes, so for example I have a 10k race coming up so I thought I need to make it easier. I haven't done it in a while on the road so I thought I'd just do it at the gym on a cross trainer, as I thought I need to improve so I'll just blast through some cardio, that's what drives me on anyway to improve.

So you have that competitive drive to keep beating your personal best?

Yeah.

Do you think it's important to be active and why? What are the main reasons for you?

It's all part of the mindset isn't it? If you're active and have a healthy body, healthy mind, all of that, it just helps with work and day to day living really. If you're in a good place in terms of your health and things like that then it translates into other aspects of your life.

Do you find it easier to have a healthy diet when you're consistently going to the gym or being more active?

That's it yeah, you can feel the effects of not eating healthy when you go to the gym so... it's all encompassing really, isn't it.

Are you aware of the UK government guidelines recommending at least 150mins of moderate intensity physical activity each week to stay healthy and reduce the risk of developing cardiovascular disease? Have you heard of that before?

No. [laughs]. I'd heard like the 5-a-day, but that's it.

Do you think there needs to be more information available about recommendations for physical activity, and advantages of being active?

Yeah definitely, I mean ones that are like 3 lots of exercise twenty minutes per day, walking or gardening or anything like that, it's only by going to the gym that you see these kinds of posters and info. I don't see anything about exercise at all, it's all just silly little stats like that. Like have only 4 beers a week, which is never going to happen! [laughs]

So do you think the information that is available is more related to, don't do this and don't do that? And less about giving help and advice of what to actually do?

Yeah there seems to be zero about exercise apart from when you are at the gym, but then you're already taking part in exercise then. So they're kind of telling you what you know already.

Do you think the public would benefit from more information then?

Well it gives people the option doesn't it?

Do you choose activities because you enjoy them? The exercise that you do, do you enjoy that?

Yeah, sometimes it's more when you've done it, that competitive aspect to it. Gets you from the point of going to the gym and carrying out the exercise, when you finish you feel the best about it- more after than before.

Is there anything you do that you're motivated to do because you enjoy it? Any sports you take part in?

No it's mainly the gym focus, rather than sport per se. I do like with running that you can go and clear your head, rather than purely just for the exercise aspect. Just clear your head and feel better and relax.

Do you think enjoyment is an important factor then or not?

Well it's a key to longevity, yeah, there's only certain amount of times you can go to the gym and do the rowing machine and things like that it does become mundane, if you mix it up and do different things each time you go, but again its more cardio related.

Obviously I know that you've maintained an exercise and weight loss programme for the last year or so, what is it that has helped you stay on track with that?

It's been from seeing results really, again it becomes rather than a fad it becomes more of a lifestyle and a way of life.

How did you get that to become a lifestyle and habit, and something that comes naturally to you now?

I wouldn't say it comes naturally, it's just things change in life and your goals in life become different, rather just going out a lot and not caring - eating and drinking whatever you want.. there's things you want to achieve, so it kind of encompasses part and parcel of that really. Once you start to see results it becomes addictive, you do more and more. There's times you know, like the last month or so I've been on holiday so I'm not going to the gym as much but now I can focus on it again for a good few weeks and then you go again basically.

Do you find it easy get back on track after you've stopped for a while?

Like going on holiday and stuff like that, you can start to put off going back to it, like I'll just have one more week off, then another, and a week becomes a month, so although I'm still doing some exercise each week, that combined with not eating very healthily as before, you start to see a difference so it's just about nipping it in the bud and going again basically.

Does reducing the risk of future health problems, such as cardiovascular disease, come into your motivation to be active at all, or is it more how you feel right now?

On a subconscious level it's there, but it's something you don't really want to think about to a certain extent [laughs] like what you've done to your body in the past, but it is subconsciously in the back of your mind. It's something you don't really want to confront, like smoking you know the reasons why you shouldn't smoke, but you still do smoke, it's kind of like that really.

Finally, overall what are the main barriers you think the general public face when trying to exercise?

It's just to want to really, you either want to do it or you don't want to. I mean it helps with the gyms a lot now, like when I was a kid and wanted to go to the gym, the membership was like 50 quid a month, joining fees and everything...but now it's much more accessible, gyms are much cheaper and lots of different classes and stuff to do.

Cost isn't as much a barrier now?

Yeah less so I reckon, its much less committal so people will quite happily go to the gym doing it for a fad but if they knew they could get out in 2-3 months' time they can do it, whereas if you have to sign up for a year they can be put off. Whereas those people might go and get into it and carry on, but initially they were put off before you had to sign up for a long time I think no contract gyms are a big plus point.

What about lack of time?

It is difficult to make time for it, you do get used to coming home from work and putting your feet up and chilling out as soon as you finish work, you sit in front of the telly at half 6 at night. But going to the gym and having that lifestyle, you come back, go to the gym, come home about 8ish, have a shower and make tea, then its 9pm and you can chill a little bit. But it's just about getting used to that lifestyle, rather than getting used to watching mundane soaps and that all night, between 6 and 8 nothing really happens anyway [laughs] not much to do, it's just about changing your mindset on it I think. It's easy to just kind of, I know I've done it where you just sit there and get back from work, have a drink, chill out, but then again its easier once you get into a routine of going to the gym – at times you really have to drag yourself there, but you never go to the gym and come out feeling bad. You only feel better. But it's just getting that effort sometimes is difficult, you can't be bothered. But if I can do the gym 4-5 times a week in the dead of winter then I can do it in summer.

End of interview

Participant 4

Is there anything in particular that motivates you to eat healthily?

Yeah, to lose weight – weight loss and being fit and healthy, motivates me to eat healthy food.

Do you feel better in yourself when you eat healthy?

Yeah, you feel better because you are healthy and you're not going to put weight on if you eat healthy food and you don't have to worry about "Oh if I eat this I have to go to the gym tomorrow morning and do this exercise" because eating healthily you feel a bit better in yourself.

Do you think it's important to have a healthy diet?

Yes it is because I think that people live longer if they eat healthy food, not in a weird way but I think that if you eat healthy and look after yourself you have more chance of not getting ill, not having heart diseases, strokes, and live longer.

Do you eat healthy to reduce health disease risks in the future?

Yeah I think the main reason I eat healthy is because I try to reduce like fats and junk food, because mostly heart attacks and strokes and things can come from eating bad foods and eating fats especially. I read that if you eat loads of bad fat it will clot your blood and there are chances you will have a stroke. Your diet is how you look. And obviously you have the motivation to eat healthy to look good as well, like if you look at someone with a nice body you think oh she looks nice and you want to eat what she does, have the same diet, and you think I want to do the same that she does, it motivates you.

Do you find it difficult at all to eat healthier options?

Sometimes it is because especially if you're going out, and everyone is going out, you have dinner out and have sometimes you have bad food, you can't eat healthy every single day because it's impossible. You need to have a balance, so on the weekend you can have a portion of chips, fish and chips and mushy peas or something, you know, but as long as you balance it well though it's ok.

Are there any aspects of eating a healthy diet that you enjoy? Such as shopping for healthy, options, cooking, meal times as social occasions etc?

Yeah I think when you cook you know exactly what you're putting in your portions. And when you're cooking or eating out, it's nice.

Are you encouraged if you're cooking for friends or with other people to have healthier or unhealthier options?

I think you're encouraged to cook and eat healthier when you're by yourself, that's how you're going to eat healthier. You know when your friends are coming round you're not exactly going to cook 100% healthy food, because most people don't only eat healthy food. So the only way to be really healthy is when you're cooking for yourself, socially you're not going to have a healthy life because if you go out and have dinners out it is very rare that your diet is going to be great. By yourself, it's the healthiest option. I find it very easy to cook for myself and eat healthy on my own, because you know what you're buying, what you're cooking, exactly what is going into your meal.

What about when you go shopping, is it more difficult to choose healthier options?

Yeah like if you go, for example, to any ready meal sections, mostly it is unhealthy and processed food. But then I think that it's easy to find healthy food if you're looking for it. The fruit and veg section is so huge. Even like baked potatoes, sweet potatoes, it's all easy to find.

But they are all in sections so it's easy to find healthy foods and bad foods also.

How did you get that knowledge to be able to know what sort of things to eat and include in your diet?

I think you read what specific vegetables and fruit is good for you. Like I know that spinach is actually good for you and can kill cancer cells, and asparagus is good for you, broccoli is good for your brain, dark chocolate is very good for belly function so you know little things and about balance, which most people find a struggle, to balance your diet. I don't think it's very hard to find out about food and we have access to the internet.

What sources do you use?

I use the internet. I would look at NHS pages, not really specific Facebook pages because people write things just to sell stuff, like if you have this protein shake it will do this, this and this, but people lie. But if you know the facts like through NHS, you would probably believe that, but not just Facebook posts and random internet posts about how to lose weight in two weeks, it never works.

Do you think it's complicated with the mixed messages constantly on social media?

Yeah I think some people just write if you drink water for two weeks you will lose this much, it doesn't matter, but it is so unhealthy for you not having all the vitamins you need. You know it's all a lie really with Facebook and social media, but you can find out what is true, but you have to look specifically hard to find the right answer. I will stick to just the average diet.

Do you think there is enough information or resources available from the government?

I think they should be doing more definitely. Like if you type in any guides for eating, it will come up with silly posts like articles from magazines and random things, but nothing else really.

What is it in particular that motivates you to be active and exercise each week? For example going to the gym each week?

Yeah the main motivation for everyone is either to lose weight or to be fit, that's it really, to look good. You're either doing it to be fit and healthy, you don't want any heart disease or anything so you will go to do physical activities right, or the other one 80% is to lose weight or not put weight on, keep your muscles good, you want to look good. Why do you want to look good, because you want to go to the gym and look nice and fit. That's how it is. Or if you are

training for the Olympics fair enough but mostly the average person goes to the gym because they want to look good.

So to improve attractiveness, it's about body image mostly?

Yeah I think for me it's body image, you want to look sexy and good you know, in everything you wear. It doesn't matter if someone looks at you, you feel more confident and better, you look in the mirror and think yeah I've done this, done perfect exercise this month and now I look and feel better because you did it, and no one else has done it for you.

Are you aware of the UK government guidelines recommending at least 150mins of moderate intensity physical activity each week to stay healthy and reduce the risk of developing cardiovascular disease? Have you heard of that before?

No I'm not aware of this, to be honest anything to do with government websites it's so difficult to find because it's not advertised. If you go on anything, it's usually through Facebook, social media, and there's nothing about it there.

Explains the recommendations...

What's the point in having them if they are not being advertised, I think that in schools and for school kids it would be good to have leaflets and advertise it. If you ask anyone about it, people know where the government websites are if they need it, like applying for driving licenses or whatever, you know it's there, but if you've never heard of it then you wouldn't know to look there. Zero advertising about exercise-say if you're driving you don't see any boards about if you go on this website you will find information.

Do you think it would be helpful if there was more information on 'how to' be active each day?

Yeah because I think people would believe in government websites and obviously it's free, people would use it more because you know you can believe it and they aren't going to lie to you. So the public would read and listen, even if it's a lie if the government say then you're more likely to listen to it, compared to a random guy who's written a blog or magazines.

What are the main barriers or things that may stop you from going to the gym or for a walk, for example after work?

I think that after work you are tired, if you have a long day at work you just want to come home and rest and it's what you want to do, being tired stops you. I think probably it's important to have the right amount of sleep, if I have enough sleep then even if I'm tired after work I'll still go to the gym because I'm awake, but if you don't sleep enough you have a long day at work and the last thing you're going to do is go to the gym.

A lot of people have said that a lack of time and energy is a key factor?

I think it is about sleep, definitely, because if I go to bed at 11 and wake up at 7 –half 7, I'm awake and can do 8 hours of work and I'll go to the gym because I'm awake, I think sleep is so

important. No matter how stressed you are, you'll feel good. Obviously if you work very long shifts then you'll be tired, but sleep just gives you energy. You get more sleep then you can have a good lunch and breakfast, everything is sweet, you can go to the gym after work, then come home and have a lovely dinner and go to bed, you'll feel great. That's how your day should go every day but obviously if there are circumstances you can't do that then it's difficult.

Is there anything you do that you're motivated to do because you enjoy it? Any sports you take part in?

Erm yeah with me I've done these gym things with a personal trainer but I feel ready for something else, you know I thought I'd like to play tennis now. I think if you do the same thing all the time you get bored of it.

Do you enjoy your personal training sessions?

I do enjoy them, it motivates you for the time being with him. You feel then that I can do it on my own now, I needed someone to tell me what to do and how many hours and weeks I need to do. I think once you get into it you feel confident, and you feel like you don't want to let yourself down, and then you can start to do it on your own. I think it's not just about the gym there's so many other things you can do, gym doesn't give you the fitness, but you go there you get changed you do a little bit of exercise then you go home. There's so many other activities people don't use I think. Even going for long walks, if you go for an hour for a long walk, it's the same activity level that you do in the gym but it's free and you can do it with friends, and its healthier for you and better in a way – but people don't do it because it's easier to just go to the gym. Say going on your bike a few times a week, people won't do that, but the active part of being outside and doing simple things it's healthier than being in the gym. When you go to the gym you do a little exercise and sweat and feel good, like when you sweat you feel like you've lost so much weight you know, but you've not really. But if you go for 2 hours walk you'll probably be so much better, with the fresh air it's so much better.

Do you think people don't realise you can just go for a walk and its good for you?

Yeah they think if I go on this machine in the gym it's so amazing and to lift weights, but to be outside it feels so much nicer and you feel free, like going for bike rides with friends and to socialise, you can easily do it three times a week, every day if you want. But its laziness really, you feel you can't be bothered or its raining, it's easier to go to the gym, but I think that if the government would do maybe something different / advertise different activities outside of work, people will go out more, because people tend to stay inside more than people used to. People used to walk so much more before there were so many cars. They need to show you, look you can go to the park or rent a bike for this much. **Yes, show how easy it is..** Yeah I think people won't be scared as much and you know they think oh I need to buy a bike, a bike is expensive I won't be able to do that, or I want to play tennis but you have to buy a tennis racket it sounds like too much money but I think that if they show people how easy it is, like if you go to Dunham park and rent a bike for an hour, why not.

So do you set yourself targets or personal goals to achieve in a certain amount of time?

Each month, I usually set myself targets usually to do with clothes, like I want to fit into this by the end of the month. People have different ways, it depends. Like in one month I want to make my arms look a bit stronger that sort of thing, I think it's best to do it monthly, actually I usually do it in 3 months. **So have you seen results and that's encouraged you to carry on?** Yes I have. Sometimes after a month or 3 months.

End of interview

Participant 5

Is there anything in particular that motivates you to eat healthily?

I suppose I just feel better eating healthier foods. With fatty foods you just feel sluggish and eating healthy makes me feel better about myself and the way I look I suppose.

Do you feel better after you've eaten healthier foods?

Yeah, if I eat fatty things I feel worse. I always crave them and then feel dreadful afterwards.

Do you think it's important to have a healthy diet? And if so, why?

Yeah, for lots of reasons really, for health reasons – blood pressure, heart problems. If you have a really high fat diet and are overweight then there's the risk of diabetes, and just everything really. Well for girls it's about wearing nice clothes and going out, feeling better in yourself and just general healthy lifestyle I think is best.

Do you eat healthy to reduce health disease risks in the future?

Yeah.

Do you find it difficult at all to eat healthier options?

No I eat healthy, I've always eaten pretty healthy. Problems are probably weekends when I might want pizza. Main problem is alcohol, not that I drink lots, but I probably enjoy a glass of wine most nights and that's my main problem. My diet isn't a problem at all cause it's always healthy, I have lots of fish in my diet lots of chicken, a bit of red meat, not lots of red meat, but like I say my diet isn't a problem really.

So say if you get tempted to have a few drinks do you find that may knock you off track with your diet?

Yes and no because I don't find it hard to eat healthy, because nice healthy food I enjoy, I think in work lots of people get takeaways – McDonalds, KFC, chippy.. I'm never tempted by that, I take my lunch with me. It's more going out sometimes and thinking I really want pizza or pasta and that's the problem – sometimes I like to snack, I like crisps and dips! I eat those every day, yes I suppose snacking is my problem, and alcohol!

Are there any aspects of eating a healthy diet that you enjoy? Such as shopping for healthy, options, cooking, meal times as social occasions etc...?

Yeah I suppose it's not difficult, I do enjoy going to the shops and I like food shopping. I like getting lots of fish and planning meals. I do like cooking. I want to get better at it so I keep trying. It's easier cause my boyfriend who I live with, we kind of like the same foods, so it's very easy to cook the same foods for each other and cook for two people and again friends and family, well all of my family and most of my friends like the same foods that I do.

Do you think it would be harder then, if you lived with a partner or family who had different food tastes or preferences?

Yeah it would be much harder, I'd be tempted if someone, like Chris [boyfriend], was saying I want to get a pizza tonight then I'd fall at the first hurdle!

It definitely helps socially, if the people around you are eating the same foods?

Yes.

What about when you go shopping, is it more difficult to choose healthier options?

Not really now, because I do most of my food shopping in Aldi or Lidl and the fish, chicken, meats are really really nice and fresh from those stores and not expensive. Whereas when I'd go to Sainsburys all the time it would be really expensive to eat those kinds of foods. I've always really had a Mediterranean diet, lots of olives and fish has always been in my diet, my family are Mediterranean so that has always been pretty easy and it's just something I've always grown up with and I like. I like those kinds of foods and I don't bring crisps in the house, if I bought crisps and put them in the cupboard I'd just eat them all [laughs] so I don't buy them.

So you think it's easier to just avoid buying that sort of food, avoid the crisp aisle in the supermarket?

Yeah definitely, Lidl and Aldi are only really small so it's quite easy to just bypass those sections. I try to plan meals anyway as it's better for a budget and finances, to try and plan meals.

Does cost come into it, as in have you found it's more expensive to eat healthier or the same?

I'm not sure, I suppose it is yeah because its things like salmon – salmon is quite expensive, I like a lot of salmon and then tuna steaks, again, I do get all of them from Aldi. I've just started using Lidl as just a different option but yeah I suppose those foods would be more expensive. Things like red meat, steaks, are cheap in Aldi so that doesn't concern me as much and veg and fruit there is really really cheap so it's mainly the fish that's more expensive.

What about the time factor as a barrier?

Yeah it's pretty easy to just shove something in the microwave isn't it, or shove something in the oven. I'm starting to use recipe books but they do take time, so I suppose time would be a factor. My job is pretty busy so I try most of the time, at least 4 out of 5 days, to take lunch in rather than buy lunch out. I've always been pretty conscious about fat content, but that's just me really, I used to go to the gym quite a lot but the last few months it's just dwindled a little bit.

Do you know what it is that's stopped you going as much?

My boyfriend [laughs]. Yeah going out and before we moved in together it was sort of I'd go to his house and bring a bottle, he'd come to mine and bring a bottle of wine, always a bottle of wine, it was crisp and dips and then going out and dating a lot at the beginning, spending time with each other, that's definitely had an impact.

So socially, going out for drinks and food has an impact, not necessarily choosing the healthiest options..?

Yeah definitely.

What is it in particular that motivates you to be active and exercise each week? For example going to the gym, walking more?

I like walking and I like running, just signed up to do a 10k race in September so I've got to start training for that really. I used to be really good at running but again in the last 6-7 months since I've been with my boyfriend I've stopped training as much, so the last time I went running I was pretty disappointed in myself, I did a 5k in like 30 minutes, which I wasn't really pleased with because it used to be sub 30. I do go to classes in the gym, I enjoy the classes. I don't like the gym because I find it really hard to motivate myself just to do a gym workout, so I like to go to different classes like aerobics or high intensity classes and things like that.

Yeah, so they're giving you some more guidance on what to do?

Yeah definitely, I suppose if you're feeling lazy or in a mood where you can't be bothered you'll just leave the gym and go home, whereas when you're in a class it's not like you can just walk out of the class and the instructor is there to say if you're doing something wrong or doing it right, and that sort of thing.

Do you like to work out in a group environment rather than on your own?

Yeah, definitely. Definitely.

Do you feel there's any stress or pressures when you go to the gym?

Yeah I suppose only if they cancel classes, if at the gym they cancelled the class and it was just purely the gym I would find that hard. I'd do it because if I don't work out I tend to put weight on, I have put weight on in the last few months because I've only been going to the gym 2-3 times rather than at least 4 times a week. I used to work out and I'd certainly notice the

difference but I can't just work out in the gym, I don't know what it is, even if I have an iPod. I certainly need music though and it helps in the classes with music on that really motivates me. So if there was no music in the classes I would struggle, and if classes were cancelled and it was just the gym I'd have to get to grips with it but it would be hard.

I guess it's a case of enjoying it then too, so if you're in a group class with music playing its more enjoyable?

Yeah, I mean Chris and me have started doing little park runs where I live so I like doing those. It's good because there's loads of people there, and at each of the stations there's people motivating you and you know how far you're getting on – you're timed properly so a couple of hours later you get your times up on the website so I like doing them and seeing how I'm doing. I have got better, so it's nice to see how I'm doing in terms on my time.

So do you like to have that competition and have targets to work towards?

Oh yes definitely, definitely.

Are you aware of the UK government guidelines recommending at least 150mins of moderate intensity physical activity each week to stay healthy and reduce the risk of developing cardio vascular disease?

I suppose that would be right then, because they say at least 3 times a week don't they, and the classes I do are usually 45-50minutes, so that's probably average isn't it.

Had you heard of these guidelines before?

No never heard of them. No I've not.

Do you think it would be helpful if there was more information on 'how to' be active each day?

I don't think so these days because you've got so many apps on your phone, you can get apps with workouts, there's one that's on Facebook now the 7 minute workout. I work in mental health and patients I see, lots of medications can make you put weight on and you can get reduced gym membership if you go to your GP now and there are things like Active Living where you can refer patients to. There are lots of free activities that you can go to, I think these days it's much better than five years ago. I don't necessarily... I suppose things like the UK physical activity guidelines, I didn't know about that, but I mean even in schools now with the children or teachers, I think it is pretty much high end on the government's agenda.

I think potentially people don't know where to look, I mean I guess I know because of work but people might not know that you can go to your GP and get a reduced or free gym membership, they might not know things like that. So maybe it is a case of showing how to access services and knowing what's actually there. But these days you just type into Google healthy living you'd just be inundated with options wouldn't you?

Well that's the other thing, because there is so much information out there on social media especially, do you find it difficult to know what to believe when there's so many websites saying different things?

I suppose it's easier for me, being a nurse, and I tell patients all the time – patients come into me and say I've been researching Google, and I always say the best thing to do is look at legitimate websites and I tell people to check NHS websites or government websites and they will always give you the correct information, rather than going on forums and things like that. But then again, if I wasn't a professional I'm not sure I'd know that, because when I tell patients that, they don't know. They say they constantly research Google for lots of different reasons and it's just conflicting information all over, unless you go on sites like NHS Choices and things like that.

Are there any other barriers?

I suppose people with physical health problems find it difficult to be active, or if they are on medication. Certainly people with heart problems, you can do light exercise such as walking. I do tell lots of patients who are seriously overweight because of medication, some of the medications that I've prescribed in work we have to tell patients that the side effects are significant weight gain as it can reduce your metabolism etc so I've had patients who within a month have put on almost a stone due to the medication, so it's also about educating people with the risks involved, physical health problems..

Smoking is also a big factor. I mean I smoke when I go out for a drink, but my work is now completely smoke free, you can't smoke on your break or at all, and then I think when you stop smoking you can put weight on, so people are stuck in a catch 22 situation. Sometimes it's a case of seeing results, it can take 4 months to see results really.

Yes, the no smoking campaigns have been quite successful over the years and most people now recognise the risk associated with smoking, but do think people realise the actual health risk associated with being inactive or having an unhealthy diet?

I don't think so no, because we were saying this the other day that all the information is going on about not smoking and they pushed the non-smoking campaigns, but they aren't necessarily giving healthy diets a look in. We were saying in work that obesity is just as big a killer as lung cancer, yet the world is crazy about no smoking but there are still all these fast food chains, not as much access to gyms - I mean you can get a referral for membership from your GP but I don't think it's that easy to do, certain criteria and things like that. So I don't think there's enough information for people, there's services out there but as for how to access it, I think that needs more work.

End of interview

Participant 6

Is there anything in particular that motivates you to eat healthily each week?

Yeah my job, I'm a fitness coach. I've got a passion for nutrition and performance so that is enough for me to eat healthy.

Is there anything you find difficult about eating healthily or maintaining a healthy diet?

I think it's probably the time because I spend a lot of time out the house I don't always have the opportunities to prepare healthy foods so my biggest hurdle is to make healthy convenience choices.

Is it important for you to have a healthy diet? If so, why or why not?

Yes, well a couple of years ago I was quite overweight and as a result I suffered with a gastrointestinal problem so my biggest reason for eating healthy is my actual health and physical wellbeing. Other than that, it makes me feel more active, I have a lot more energy, and I'm able to perform in the gym a lot better than if I wasn't eating healthy.

So generally it makes you feel better in yourself?

Yes

Do you think about future health risks or reducing risks when it comes to making healthier food choices?

Well yeah that's always in the back of my mind. I don't want to increase the risk of any cardiovascular disease or Type 2 diabetes, or any other sort of lifestyle related disease risk factors.

Do you think there's enough information out there about healthy eating?

I think there's a lot of information out there but the issue is I think it is very conflicting and confusing. For example you're told to eat one thing by one nutrition standpoint then you're told to eat something completely different. Or you're told to reduce the consumption of a particular type of food in order to be healthy.

As a personal trainer have you found that your clients struggle with that?

Yeah, one of the most common questions that I get asked is - what should I eat? The types of clients I generally have are normally for weight loss so they'll always ask me what should I eat to lose weight. And that question will be answered relative to that individual, everybody has a different lifestyle which will affect their nutritional choices and habits.

So for yourself are there any aspects of eating healthy that you enjoy? Such as shopping, cooking, meal times as a social occasion...?

Well I really enjoy cooking and cooking is a big passion of mine so to take a raw ingredient and to turn it into something quite tasty has always been something that I've enjoyed doing anyway so I've got no issue with doing that.

Do you find it hard or stressful to shop in the supermarket for healthier options?

Not at all, not at all, I think supermarkets have clicked onto healthy foods and packaging in an easy to understand and cook way. For example you've got bagged salads, you've got fruit in bags, you've got lean meat choices, you've got alternatives to convenience foods such as pork

sausages, you've got chicken sausages that are low calorie so the options are there. I just think that maybe the choices that are made towards those options aren't always mindful, for example you wouldn't go and choose a chicken salad if you were stressed – you'd go for something that is highly palatable and highly tasty, energy dense and cheap.

So if you're stressed do you think it's more tempting to get unhealthier options?

Certainly yeah because food can be used as a way to make somebody feel better, so if somebody has had a bad day, a stressful day, they're tired. The last thing they're going to want to do is run around the supermarket five minutes before it closes, pick up healthy options. 9 times out of 10 I've found with my clients that they will go for something that will make them feel better - or example if my client S likes to go for a pizza over say chicken and broccoli because it makes her feel better. The biggest hurdle is that I don't want to take that pizza away, I want her to still enjoy the pizza but educate her on how to fit that in her diet and help her lose weight at the same time.

Do you think people find it difficult to maintain a healthy diet if they don't enjoy the foods they are eating then, especially if they are trying to lose weight?

Massively yeah. One of the biggest things and the first things that we look at with my clients is the types of food that they enjoy. I'm not going to prescribe a diet or give nutritional advice based on foods the clients don't enjoy because that will lead to adherence issues. For example somebody who doesn't enjoy doing something then long term they're not going to do it. It may give short term results but if they find it too stressful, for example, if my client doesn't like chicken and broccoli, I'm not going to ask them to eat it six times a day, I'm going to find foods that they enjoy in a manner which causes the least stress as possible but still ticks the boxes in terms of getting them to reduce their calories and expend more energy which will equal weight loss.

And have you found that to be successful?

It's certainly been one of the key contributing factors to my clients' success, is always starting with something that they enjoy and as they progress forward and move on, over a period of a couple of weeks or months we can start introducing new foods or nutritious or nutrient dense foods into their diet. But that falls down to habitual issues and behavioural changes which is, I would probably say, the biggest hurdle.

What about cost as a barrier, have you found that eating healthier is more expensive?

Yes and no. For example a couple of years ago eating healthy would have cost me a lot of money, for example fruit and vegetables, because the low calories you need to probably eat a little bit more of them to feel any sort of satiation. Lean meats are generally a lot more expensive, for example steaks and chicken breasts tend to be a lot more expensive but since companies like Musclefood and Athlete and other bulk buying meat companies have hit the market place over the last couple of years, buying lean meats has become a hell of a lot cheaper. One thing that I do suggest is looking at buying in bulk, if I wanted to improve

someone's diet, one thing we would normally look at is how much protein they are getting, as a general rule I find that people's protein is too low. If meat is a good option for them and meat is something they want in their diet then I'm going to look at the cheapest possible options, the most economical option for that client to get more protein in their diet, more meat in their diet. By looking at buying in bulk from companies like Musclefood or even just going to the local butcher who will do it a hell of a lot cheaper than the supermarket do, and exploring those more economical avenues rather than just going to the supermarket every day and spending five pounds on some chicken strips.

Do you think that public health campaigns or local authorities should be showing people how to eat healthily then, like how to shop economically?

Again I think that falls down to education. I could give a client a price list of, you know, a box of chicken breasts from Tesco, Asda, Musclefood and then that's down to them if they want to include those options into their diet and budget, that's absolutely fine. Budget is a big thing, you know not everyone has £150-200 a week to spend on food and I do get that healthy food isn't always economical if you're looking at just buying single packs of fruit and veg it becomes quite expensive. But if you buy in bulk you can look at buying things that have a longer shelf life in terms of you can buy a pack of fresh broccoli for a pound or you can buy a bag of frozen broccoli for a pound but you get more broccoli with that and it lasts a lot longer and you're not having to bin it after a few days if you haven't used it. Looking at alternatives, there's nothing wrong with frozen food obviously, it's just prepared in a different way and it's a hell of a lot cheaper if that's an encouragement point for me to put across to that client, that eating broccoli or any sort of veg can be done a cheaper way without them spending you know 20 quid a week on it, then we'll look at those options.

Ok, in previous research lack of time has come up as a main barrier to healthy eating, does this come up quite a lot with clients?

Yeah it does come up a lot with clients but it also falls onto their level of commitment and it also falls onto what will take you back to what their goal is. So just to put it into context: if I've got a female who is 40% body fat, she's 3stone overweight, would it be wise to suggest that she has to prepare 4-5-6 meals a night before every single day, for the next 6-12months until she loses that weight? No. Because the only thing we have to do at this stage is get her into a calorie deficit and the meal prepping and the tracking calories, tracking macronutrients, improving micro nutrition, meal timing, nutrient timing and all of that, that's something that we would work on over a long period of time, slowly, slowly, slowly, until we find something that she's comfortable with. If I had a competitor who's about to step on stage in ten weeks, she may be 16% bodyfat and we are 3-4 weeks out from a show, her goals are going to be slightly different- she may have to look at the option of preparing food beforehand, weighing her food out, tacking macros, improving the quality of her nutrition pretty much spot on, so again I'd probably say it's goal dependent. As a general rule of thumb, time does matter to everybody but I think we have to look at the goals as well, we're not going to have somebody who is 40% body fat spending two hours a day prepping food, it's just not going to happen.

Is there anything in particular that motivates you to be active or exercise each week?

Just the enjoyment of it. I exercise and not necessarily looking to get on stage or get shredded, I exercise because I really enjoy it, I love the way it feels and love the pump. I do a lot of weight training mainly hypertrophy or bodybuilding – same thing really, I just love the way it feels and the way I feel after training and I like to learn as well, I like to learn about myself and see how far I can push myself.

Is there anything that you find difficult or barriers that may stop you from being active?

I've had a lower back issue to deal with so a lot of the exercises that I really enjoy doing - dead lifts, squats and front squats, a lot of them have been a bit of an issue for me the last couple of years because every now and again I've got lower back pain to deal with so it's not always enjoyable for me because I have to take the exercises that I most enjoy out of the training plan. But there's always ways to work around it.

Do you ever struggle with time for example if you have a lot of clients in the week is it hard to fit exercise in, is it tempting to just give it a miss?

It is tempting. For example today, I had 4 clients in from 6am until 12 o'clock. I had a little time in between clients but not enough time to train, in the afternoon I had to attend a seminar then come back to the gym to sort out another client so today has been difficult to train. I didn't train because the muscle group I wanted to train was my back so I'd need to spend a lot more than half an hour which was the only time slots I was sort of allocated to train. If for example it was shoulders or legs I could train them in half an hour, I could have fitted a session in then but unfortunately today, time and my diary management didn't allow me to get the training session in, but I suppose that's my fault.

Ok besides from exercise in the gym, do you think it's important generally to be active?

Yeah definitely, I spend the majority of my normal day – a 14 hour day usually, the majority of my day I'm on my feet. I track my steps and I do normally between 20-25 thousand steps a day. I walk to work which is a two mile walk, so I probably spend a good percentage of my day on my feet. The only times I sit down is to do admin work or to have a coffee, or watch television in the evenings.

Are you aware of the UK government guidelines recommending at least 150mins of moderate intensity physical activity each week to stay healthy and reduce the risk of developing cardiovascular disease?

Yes I am aware of it but I haven't seen much about it.

Do you think it should be promoted more to the general public?

Certainly yeah, I think that the encouragement of physical activity is always of some benefit. The problem is, you can tell someone to exercise or tell everyone to exercise- it's good for you, it's going to reduce your risk of heart disease, diabetes, but at the end of the day it's to find

out what that individuals reasons are for wanting to exercise, and I can tell you now that 9 times out of 10 it won't be health related.

Weight loss, body image?

People just want to look sexy at the end of the day, and as shallow and annoying as it is, health should always be at the forefront of everything that we do but you know as a well known coach in the industry told me, Bob doesn't think about his heart attack until he's had it. All Bob wants to do is look good in clothes and appear attractive to the opposite sex, or the same sex if you swing that way. And as a by-product, health marks improve – cholesterol marks improve, risk of diabetes is reduced, risks of heart disease is reduced, inflammation, glucose tolerance is improved, insulin sensitivity is improved, so yeah.

Do you think people realise that but they still feel that the most important thing is to look good or do you think that they don't realise the real benefits of exercise?

I'd probably go as far as saying that everybody knows that obesity isn't good, but I don't think people realise the real extent of which it's not good for them. It's again, a master of education, I'm not going to tell a client that I can reduce their bad cholesterol or so-called good cholesterol, you know, the way that I would attract a client into helping them lose weight by looking at what they want from it. So if they want to get into the next dress size down and that's an achievement that's certainly worth having a pop at, then we will certainly do that and the health markers will improve alongside it.

Have you found a difference in your clients' goals dependent on either age, gender, or any other differences in demographics?

Yeah definitely. I mean I don't just deal with weight loss clients, I deal with clients that want to build muscle. For example I've got a young female who is preparing for a photoshoot at the moment and her goals are slightly different to everybody else's, but the meaning behind it is exactly the same. The client who's preparing for the photoshoot wants to look good, my client who is 40% body fat and wants to lose weight, look good, the goals are pretty much the same in terms of the end point – they both want to look good, they both want to feel good, the both want to get into clothes that they want to wear and feel comfortable, they both want to appeal to the opposite sex. As a result, both will improve their health markers, their starting points are slightly different.

Do you ever find that your clients, or people coming into the gym, ever find the gym environment stressful or daunting and if so is there anything that can help with that sort of barrier?

Yes certainly. I mean the majority of my clients may have been in gyms but they're never maintained a healthy relationship with exercise or nutrition. Mainly down to the fact that they are very uncomfortable with the way they look so I think a good starting point with any of my clients is to find something that they're comfortable doing and that they enjoy, so it gives them another reason to go to the gym other than the focus of losing weight. If you get them coming

in the gym doing something that they enjoy, for example if they wanted to learn how to box or hit the pads, then we would make that a focal point, certainly for the first couple of weeks or first couple of coaching sessions so that they get comfortable with being in the gym. One of the biggest and the most frightening experiences for somebody new going into the gym is the fear of people looking at them and judging them - we want to eradicate that as quickly as possible. We also need to be empathetic as well as they are stepping outside their comfort zone and other coaches find that difficult to understand because it's something that we really enjoy, we really enjoy the gym, but a lot of our clients don't and if we can put ourselves in a situation where we would feel uncomfortable I feel that a lot of coaches would understand and develop a level of empathy and it brings them to their clients level instead of asking clients to step up to their level and really enjoy the gym.

Have you found over the years, learning how to communicate with your clients is a big thing?

Yeah massively. When I first started in the coaching industry a few years back, I'd been through quite a successful weight loss journey and I wanted other people to experience that. The way it was done to me was quite restrictive – trained sometimes twice a day, I ate a very low carbohydrate diet and I thought that that was the way to do it, I thought that every overweight person who stepped in the gym that's what they wanted, that's what I'd do with them, but unfortunately this was pressing my ideals onto them. I wasn't actually looking or being empathetic towards how they felt or what their goals actually were, and I learned very quickly through dealing with a bunch of clients that you know everybody has to be treated with an individual outlook and not necessarily just pushing the same sort of ideal onto everybody.

Finally, back to yourself, have you found that working in a gym environment surrounded by people who probably exercise a lot, other trainers and people, have you found it easier, or more pressured to fit in and eat healthily and exercise? And could this be more of a motivator compared to those who for example work in an office environment?

Well I've got quite an alternative view on that. I'm only interested in people that I can help and the other coaches in the gym aren't the people that I seek out to help so most of my client base is looking to lose weight, they don't want to eat chicken and broccoli six times a day. Not only that they're not entirely comfortable with somebody who is, you know, always banging on about how clean they eat or how much they train, so I'm just like them – I enjoy my food, I enjoy a drink, you know I don't always enjoy training and I make sure I make that point – that they feel comfortable with knowing that I'm not some robot, I'm not a clean eating freak or anything like that and I don't train three times a day. I'm just like them at the end of the day. I love training you know, and I do as much as I can and I have a passion for nutrition, but I don't always feel that way. Sometimes I want to eat McDonalds or a takeaway and I think that they [the clients] find some sort of comfort with that as well and that's my way of showing that I empathise with them. It's not always about training and the gym, or about being in shape, at the end of the day you've just got to be happy – if you're not happy then, you know, it doesn't matter if you've got a six pack or not, it's not always going to make you happy being in shape.

One thing that did come up in previous interviews – one person suggested they would like separate gyms depending on goals and ability- they sometimes felt intimidated going into a gym and seeing someone at a really advanced level from years of training, really muscly, they found it made them feel uncomfortable and didn't want to stay. On the other hand another participant said that sort of environment would encourage them more and give them goals to set. What's your opinion on that?

I mean yeah they do. If you look there's a company in the States called Planet Fitness – if you look at their adverts they're absolutely brilliant. They have burger days, pizza days, donut days, bacon buttie Fridays or whatever – whilst that might sound a bit like, why the hell would a gym do that, it's entirely sort of going against what a gym actually stands for, it attracts people that actually you know what, that's the sort of gym they would go to – what it's actually doing is it's getting people through the door and it's demonstrating that a gym isn't scary, it's not full of 'bro's' you know, and I think that particular gym doesn't even allow you to squat or deadlift which actually you know what I don't really agree with to a certain degree, but you know it makes sense! If you put a person that didn't like the gym or felt very uncomfortable with their image, if you put them into a gym like Emporium in Birmingham, that's known for being a bit of a bro gym where everyone is in shape and is massive, all the chicks are wearing really tight pants and have really nice bums, you know that's going to really put someone off, so I think yeah there's a different market place. The gym I work at, Pure Gym, if you've ever seen a Pure Gym advert, it's very unintimidating you know, it is a gym for everybody, it really is a gym for everybody. It's not segregating body builders or general public or power lifters. You know we've got Olympic racks for people that do heavy lifting deadlifts and squats and we've got cardio kit for somebody who just wants to come in and get a bit of a sweat on. We've got tons of classes, it really is a gym for everybody and it markets itself as that, so I think it's generally down to how a gym markets itself. A gym that markets itself as a bodybuilding gym won't attract the general public that just want to come in and lose a few pounds if that's all they want and are not really too bothered or massively serious about the training.

The gym you mentioned there is 24/7, and low cost? Do you think that's an important factor?

I'd say so yeah, people that finish their bar jobs or their night jobs can get into the gym no problem. So it opens up another market whereas a lot of people who normally might not be able to get into a gym because of shift hour work, like nurses, can't always get into the gym during the hours of 7am-9pm, they can only make it say 10, 11, 12 o'clock at night. Yeah again it's just another feature that is available for another market.

Is there anything else in terms of barriers or motivators to exercise or diet that you'd like to add?

I think I've covered pretty much everything, I mean I could go on and talk about this all day but that's covered most things I think.

End of interview

Participant 7

Is there anything in particular that motivates you to eat healthily each week?

Yes I suppose it's finding the difference in energy level that I found especially since a lot of my dietary traits changed about 12 years ago, and I wanted to trim down body fat and basically just get fitter. That is what, in 2004, and ever since then I've kept that programme sort of off and on. Usually it goes sort of 2 year cycles of it going up and down but the basic level of motivator is to stay in with a certain range of fitness level and depending on how active the weeks are, that's what then dictates kind of what I'm doing. So my sports have changed as well so I've not introduced sort of doing quite high levels of endurance work as well as short interval stuff that I do when I'm playing hockey. For the triathlon stuff it's extended periods of time and the nutritional aspects change again for that, so where previously as an example, prior to that there was a mix of I suppose carbohydrate and protein leading up to hockey

events, when it went to the triathlon it was probably more carbohydrate loaded and then introducing more things like tinned fish and stuff in the day as it was just easier to consume and I felt like I recovered better when I had those sorts of things, and increasing more supplements as well in afternoons and evenings.

Largely your nutrition has been down to your sports and performance goals then?

That's right yeah.

You mentioned your diet changed then when you started playing sport, is there anything you found difficult or challenging about changing to this new diet and to maintain it?

It was, at the very beginning it was very challenging to get through periods of starvation, that's the hardest thing when you feel hungry and to be fighting an urge all the time. Sometimes it can just be boredom and say especially if you've been doing long stints of exercise you know when you're recovering you're not doing enough so you could be sitting down and thinking oh I'm hungry should I eat, but you know it's not the thing to do. When you're at work, that's another thing, if you are sitting down for long periods and other people are eating all the time it is very difficult then to fight those urges to stop but it's my motivating factor because I knew that I wanted to reach the goals that I wanted to attain. I just held that back and kept what my sort of strict routine was for the day. So yeah that's what sort of motivated me.

So if you have the motivation to keep going and achieve your goals then that helps with resisting urges to eat more or eat healthier options?

That's right but it was easier when I was younger but now it's even harder because you feel like you've been doing it for so long that now should I give myself a break. And I find that more of an issue now to say ah well it's alright.

If you did give yourself a break, even for a few weeks, would you find it difficult to then get back on track with your diet or is it fairly easy?

I find now what it is that my motivation to train has never been an issue, I can never go more than a few weeks without training it just doesn't feel right and I get very anti about it if I don't do the training and I sort of beat myself up about it then. But for the eating side I definitely recognise that because when I started to change my pattern of training, from about 4 years ago, of doing more heavier weight sessions and I was swimming more and I put on more muscle mass, from that and becoming heavier and a lot bigger than I used to be, probably about an extra 15 kilos heavier than I was, that once you've got up to that level, trying to trim down specific things like body fat level is very difficult to trim back. So that's the thing that I'm trying to do now, but as you get older that's what I found to be very hard – the specifics are very difficult to control because then you're having to do, it always seems like nothings working and the temptation is to try and think of scales each day oh what am I losing, but you can't look at it that way [laughs]. It's just a never ending nightmare! So that's probably the hardest factor now, going from a heavier weight to dropping back down, in a specific fashion where you don't want to lose muscle, you want to become leaner and so that is difficult, it's

become a difficult thing to have to deal with. So then your motivational factors change because you're aiming for specific targets.

Previous participants have mentioned how exercise and diet go hand in hand with each other, do you feel it's like that?

Yeah I think that's right, I think that's where it sort of kicks in, it's a hard one as well because sometimes you feel like one thing can go into another, so say if you had an early morning session but you didn't feel like having anything to eat that morning and you wanted to train on an empty stomach, then you would but then the knock on effect is that you come back and are even hungrier than you were to begin with - so then you find yourself in this quandary where you think, so does that mean now that I can allow myself to eat a little bit more? Even if it's good stuff it doesn't matter, you're just piling on that extra amount of food that you then have to burn off - but all the time now I try and keep in my head. There's a guy at the British cycling, Shane ..., that was involved in all of the gender stuff and his talk with Bradley Wiggins when he went to do the Tour de France- was treat yourself like a car – if you're just going down to the shops you don't need to have a full tank of fuel, you just need to fuel a little bit to keep yourself going for what you need to do that day. So if you've got a light session all you need is a little bit of fuel, you don't need to fill the tank, you know, if you're not doing a heavy session then you don't need to fill the tank up full. Harder said than done though! [laughs]

Yeah portion size is a big part of it, especially in the UK and USA, going to restaurants or takeaways it's massive portion sizes and it's something I think we've got used to. I don't like to waste food either.

Exactly yeah.

So for yourself, are there any aspects of eating healthy that you enjoy? Such as shopping, cooking, meal times as a social occasion with friends/family?

It doesn't really bother me too much apart from when you know you're probably going out, that is the thing, the quandary, you know, do you make decisions before you go about what you're going to eat or drink, because that affects both your training and recovery pattern. So that's the hardest part I think, fitting it in and to allow yourself the freedom to do that. No I don't find it much of a problem at all really, I've been eating fairly healthy for quite a long time and we tend to have a mixture of fish and meat during the week... so you know we try and get an even balance of the three. We always have lots of vegetables, salad and fruit and everything.

Do you enjoy the food that you eat and cook rather than just because it is the healthiest option?

Yeah I think I actually enjoy what I eat, I like it yeah. Because I switched from eating, like at uni, cheap frozen foods all the time and it got to the point where you just can't stand anymore so that was when I switched. I did two years of that and I just thought you know what, I'm getting

up and feeling pretty crap so I want to do something to make myself feel a bit better.

Yeah once you start feeling better in yourself after eating better...

Yeah that's it and I find that my sleep is better too you know, you feel recovered.

Do you find it's more time consuming having to prepare food every week?

Yeah that's the thing, so when I'll go back this time and last time I was working in an office about sort of 18 months ago, that's the hard thing is then balancing the portion size each week. I tended to do it so Sunday was the cooking day and I'd just pretty much prepare everything on the Sunday which would take me through to probably Wednesday or Thursday and then you've if you've got time on maybe Thursday, and you'll but something on Friday and then you're back into the next week then that's what I tend to do so then split everything down on the Sunday cause then it's like you've got nothing then to have to do in the evenings. If you make whatever it is, like a pasta salad sort of thing, you know all you have to do is chuck your fresh salad in.

The time that you worked in an office environment, did you find pressure especially towards the end of the week when others are buying unhealthy food, did you ever find the social pressure to join in? I don't know if they ate really healthy in your office or not?

No, they were awful! But I think it helps me the fact I've not got a sweet tooth so stuff like cakes and chocolates I'm not really interested in anyway so that was an easier thing. But then I'd always think to myself, well if there's one day in the week that you end up eating something that's just there and readily available, like sometimes they get pizza, if things have gone well in the week then that's fine. I'm not going to beat myself up over it and turn it into anything big as long as I know that I can get up and do my session the next day I'm all good with that. But I don't know, I think sometimes this comes with age, as well as you become a little bit less worried about it, I think when you get a bit older you tend to be a bit more relaxed about it too, the fact that you don't want to just go down the road of beating yourself up over everything cause then it has a knock on effect on everything else.

That's the other thing, do you look at your diet in terms of how it might reduce health risks in the future rather than right now or is it not really a concern for you right now?

It is. When I went through my immigration stuff in New Zealand it was just a very stressful experience but on the day when they took the reading for my blood test it showed quite high levels of cholesterol but it was because the whole thing was a bit stressful, well the thing with blood tests it's taken on the day and they day before they tell you to eat certain things...

Yeah there are a lot of things than can affect it.

Yeah exactly so what had happened is that when we'd had it done it just showed high levels. I had an ECG done in Argentina the year before and the guy had told me you know you're absolutely fantastic you know, couldn't be better. So it's one of those things where at that point I was worried about it, that concerned me at the point, so then I thought I know I need

to reduce it so I'll start to alter things in my diet, but really it was fine it was just one of those situations where it just spiked higher because of the situation. But that was the only time really that I've thought about it because I know that I've always kept up a decent exercise regime, I've always been involved in sport so apart for that moment in time it's never really concerned me too much.

I'll move onto physical activity- so you're fairly active each week with being involved in sport and everything. Is there anything in particular that motivates you to be active or exercise each week?

No it's usually goals or maybe events that I'm going to or want to be involved in, or even silly things like I said that to get a new bike. I'm going to invest money in it, so I want to be in a certain weight category because otherwise there's absolutely no point in having one and not the other. So it can be either a motivating factor like that, say if we're going to do this then we do it properly. My issue now is that I really concern myself over recovery because you know just general wear and tear, that's the thing that concerns me the most – of how much I'm doing and how much pressure that puts on my body to be able to recover for the next session. So I'm more mindful of that now, whereas before it didn't ever enter my head, but I find it's harder now to recover properly, because I've just taken a few sort of niggles here and there that have sort of stayed but I just try and manage that as much as possible. I did go down the line of trying to have more Omega 3 because that's supposed to aid recover, well allegedly, a bit better, so I try to do that a bit more. And take on a decent amount and mix of hydration and general rest, so that's why I was asking you about the sitting hours because I tend to do more of that now to recover, than I would have done in the past where it would have been more a case of a recover bath of ice bath and compression and then you're off doing something else then an hour and a half later, just to make sure your legs had recovered.

But most of the time it's just events really, I tend to go through periods like with the build up to Iron man in Mexico a few years ago. That had other things attached to it you see, like I went through bigger bouts of probably eating more than I should have done just generally because I felt more tired and I didn't want to put myself in a position where I was always feeling really knackered and ill basically. You don't want to feel too run down and also the extra stress that went with build up to a big event that you've paid lots of money for, which was more like emotional stress rather than other things that you had to deal with. And sometimes the hard factor is you always focus it just on yourself, you always think you're the only one that's going through it when actually the stories from a lot of athletes across the board at elite level professionals through to the general public, they're all feeling the same things. But the sad thing is you don't know that at the time – you think it's just you that's struggling and everyone else is having a great time.

You mentioned about supplements for example Omega 3, what type of sources do you use and would you believe, to make choices of what to consume?

Well I was very lucky in the fact that when I started doing it, I mean for my initial stuff 12 years ago, that was just reading one book on sports nutrition, the essential guide to sports nutrition I

think, and that was the starting factor - that laid out sort of a rough amount that you should be consuming each day and how to break it down into portions and that was my first sort of depth into it. But now it's a bit more specific, I actually went onto British Cycling and they had some really good online nutrition sources and they've done some really good webinars – I don't know if you've ever seen them but one guy, I think it's Nigel Martin who is the Team Sky nutritionist, he does a really good talk and it's about an hour and ten mins, you can get it on YouTube and it's really interesting. And they use food first and that's now what I tend to cater more towards. With the triathlon it's difficult because obviously in time, like with the cycling, it's not like you can go and make yourself a sandwich and you're on your bike... but theirs is all prepared, they have rice cakes, and vegetable juices in the morning and their system is really good. Actually I'm going to follow their routine for probably the next event I do which is to take on board a strong amount of fluid in the morning, but just do it earlier so they're looking at 3 hours before starting hydration. Yeah I definitely recommend it, even if you just were sitting down and doing something else and listening on YouTube in the background. One on nutrition and one on psychology and they all tie in with each other, it gives you motivational factors and the way they've approached nutrition – their nutrition approach has basically come through experience of working with different things, seeing what works and what doesn't. The guy is really good actually and he's really honest about his background and how he's come to the front so yeah probably now for me it's food first because supplements are ok but I've found that using different ones, especially protein drinks, have a whole mix of effects – either I've put on a lot of size through using one supplement plus obviously a heavier regime of training etc with a New Zealand brand called r3 – it was great at the time because it kept me full but really I just didn't really need to be having as much as it was prescribing on its packet – but then again you learn from experience and that's it. Their gels were really good though, like energy replacement, that worked for me – keeping me hydrated and stop cramping up. It kept me fuelled throughout the day so that was a big thing but I always prefer food. I have to say it's food first for me.

And also the thing I went off, I used to take extra supplements and mixes, but then I read a whole bunch of stuff saying rarely it ever gets into the blood stream. A lot of the time it can't even break through the digestive walls to get into the system. So after that I thought actually I'll just use food and that tends to work for me.

Yeah there are so many supplements and things on the market now and you have to do your own research really...

Yeah it's whatever works for you really. And that's another thing the British Cycling webinars are really good at, it's saying that one size doesn't fit all, it's all individual and athlete specific – it's all catered per rider because you can't do a blanket, what works for one doesn't work for another and with the endurance triathlon stuff it's exactly what they talk about - saying we do give out certain gels on course if you run out but you have to be aware that they won't necessarily be catered towards your specific thing so if you have a bad reaction to one then you can't blame us really – you have to plan out your day. It can happen, I mean I've seen people react really badly to it and been very very ill so if you don't practise then it makes a

huge difference, but yeah I mean for the actual day to day intake always tend to go food, I don't use supplements really. The only stuff I have is watered electrolyte Lucozade drink because that works for me. It works for me but might not for others.

Are you aware of the UK government guidelines recommending at least 150mins of moderate intensity physical activity each week to stay healthy and reduce the risk of developing cardio vascular disease?

I've seen it only because I've been involved in it. I have seen stuff but you do have to go looking for it. I mean, do you even know – I'll ask you a question – do you know where Trafford Sport Base is based at?

Probably not no [laughs]...

Altrincham Leisure Centre. But you'd never know that would you? I only found that out because I was looking around when I started my business [*hockey coaching*] and I was looking around for people to link up to, but they have no interest in anything other than really being at that gym and people coming to them – not the other way round. They really... I think the whole thing is because they've been told they need to do it, they're just saying that because they've been told to. But it's not going to change everyone's pattern, it's only because you see more stuff that's advertised through links with sponsors but they always do the same thing – they always target football because their sponsorship money is there already. I don't think there's been any drive anywhere else to alter the patterns really.

From your personal coaching experience, if you've done much work in Trafford, is there anything more you think that local authorities or Trafford council could do?

I think there's really easy links, they could just promote the amount of facilities and clubs that they have. I mean Trafford is different because we have a lot of open fields and facilities there waiting to be used, you know, anyone of us we are fortunate living in this area. We can go to Walton Park there's a football field there that's never used, there's tennis courts, there's a basketball court there. I think the thing that they need to do is utilise the people they've got. They've got one of the best running clubs in the country, they've got you know an indoor facility at the Etihad stadium 25 minutes away, and I mean when you go there there's 3-4 athletes training in the indoor facility because no one really knows it. I mean during the week it's really busy because the athletics clubs are there but they have to source their own athletes, it's not as if people are pushed towards doing it. And they can only take so many because of the insurance issues with athletics so I just think what they need to do is utilise the people they've got. I mean they're there. Brooklands sports club is there if people want to join in and play hockey. There's about 10-12 tennis courts there, and if Trafford subsidised some of it and helped transport kids around you know I think they would fill every single facility they've got – but they don't. I mean I don't even know who their sports officers are, you have to dig deep to try and find who these people are who are allegedly coming out and helping out, and I think when you have the activity, then you can start to increase levels of teaching about

nutrition and nutritional advice to actually make the kids, when they become older, be responsible for what they need to be doing.

It seems like the information and knowledge is there, the facilities and resources are there, but there is a gap between the two – of actually showing people how to use what's available and be involved?

Exactly and at the highest level you see, going back to the British Cycling and UK Athletics, on the course now you see the coaches they tell you it's ownership – that the athletes have their own ownership. It's not just to say elite athletes should do it – kids can do it if they are old enough to be talking on mobile phones and playing around with their mates on computer games, I'm pretty sure of the fact they can take some ownership on what they're doing and where they should be heading towards if that's what they are interested in. But I think yeah, the Borough of Trafford could be doing a lot more to open people's eyes as to what is available to them.

End of interview

Participant 8

Is there anything in particular that motivates you to eat healthily each week?

I think no red meat is probably part of that because I'm vegetarian for habit reasons, basically my parents are vegetarian so I've just eaten what they cooked at home and I've continued to eat that since I've left home so that's the main reason. I think it's probably the things I eat are probably based on what my parents eat.

So when you go shopping for food do you try and choose healthy options or do you just choose the food that you're used to eating?

Yeah I do choose them, I am aware that I'm choosing healthier options like I will try and have brown bread instead of white bread, or brown pasta or rice. I think I've just got in my head that wholegrain is better than processed foods so yeah I do try and choose healthy food as well when I can.

Is there anywhere in particular that you look for information about nutrition, are there particular sources you would trust or read for information?

Yeah I think, I've had a couple of cook books like vegetarian cook books, which have on the back pages like a list of ingredients and they will tell you how much fibre is in each thing or how much energy or vitamins and things like that. I don't really trust it when like cereal boxes and things advertise wholegrain and things, because I think that when it is really sugary there's no way it's going to be very good for you – they're just advertising one part of it, so I don't trust that kind of marketing, but I do trust the books.

Is it important to you to have a healthy diet?

Yeah, I eat to feel better basically, like I eat healthily to feel good and because I think it does have an immediate impact if I eat fruit or salad or something I feel much more energetic and much more mentally capable than if I eat a McDonalds or Subway or something. Especially when I was at work, if I had a Subway at lunch time I would always feel tired in the afternoon so I'm always cautious about trying to keep my energy levels the same throughout the day and not have that dip after lunch.

Do you believe there to be any barriers to eating healthier or is there anything that encourages you to not eat foods like McDonalds etc?

I think occasionally I do just want sugar. Occasionally I do just want to have something a bit unhealthy you know, like a cake or sometimes if I can't be bothered to cook I'll just get a McDonalds or other fast food if it's convenient you know. So I'd probably say convenience and occasionally just not caring what you're eating because you just can't all the time.

Lack of time and convenience has come up in previous research as a key barrier. So do you think that is sometimes a barrier for you as well then?

Yeah I think some things take longer, like rice takes longer if it's brown rice, and you have to do a little more planning beforehand to buy the right things and they are not always available in the local shops – like you can't always get, non-processed foods or the bread you like, in the corner shop near your house so you have to plan to get it when you go to the supermarket.

Are there any aspects of eating healthy that you enjoy? Such as shopping, cooking, meal times as a social occasion with friends/family?

I do enjoy it, like I do like cooking more and more. I didn't used to like it but I do like making nice food and improving it and making it tasty and adding things, and trying to add things that are healthy as well – I like to add spinach and things. This is a big thing about being vegetarian though I have to think carefully about what nutrition I'm getting so I think I have to think, oh I

should have some spinach or I should have some beans, so I'll add that in, but I do like that though.

Do you find it stressful then, to have to plan ahead or prepare particular meals to get specific nutrients in?

You just get into a routine I think and it's not so conscious necessarily all the time for me. It's like I know the things I should have and then when I'm shopping I just automatically put them in the basket you know, I don't necessarily always plan so rigorously, but yeah a little bit.

I'll move onto physical activity, is there anything in particular that motivates you to be active or exercise each week?

I think that's routine again, I'll play 5-a-side football every Wednesday so that's kind of, I like that because it's with my friends and it's just a set time when you do exercise and it makes you do it every time. Because I think if I didn't have necessarily a schedule, I might go off it a little bit so it's good to say like okay Wednesday 5pm I'll do that, and I do running as well, just because I enjoy running so I do that one or two days as well.

You mentioned enjoyment as a factor, so do you think that's one of the main motivators then - that you enjoy being active and doing those activities? Do you get enjoyment out of other activities such as going to the gym?

The other thing about the football is that it's a social thing. I'll be meeting up with my friends so there's that as well. I enjoy the activity and I enjoy the kind of like chatting and all of that stuff that goes on before it. The gym I used to go, I went to a gym for about 2 years and I didn't really see any change in myself and I was trying quite hard, so then thought I'm just not going to bother with the gym. I think my body type doesn't really gain muscle very easily so I just stick to running which is what I think I'm more suited to, so I think that with the gym I didn't enjoy it as much as football and then wasn't really getting the results so just kind of sacked it off.

So for the running do you set yourself targets and improve each time? Have you seen results from that?

Yeah definitely, I did the 10k in June and I was building up to that, so when I was running I was trying to think like okay how hard was it to run the 5k and could I do it quicker, so I do have targets.

Do you think it is important to be active? If so, what are the reasons?

Yeah again it's the feeling better and feeling healthier and feeling more alert and more, yeah, I think I want to live longer as well [laughs]. So staying healthy and yeah there's a certain amount of you know, the TV adverts that say you need to do 20 minutes of exercise a day –

there's like a minimum amount you have to do, so I do kind of have that in the back of my mind so I think that I should really do something.

Ah you're one of the first participants who has mentioned that they'd seen information about that. The next question I was going to ask is are you aware of the UK government guidelines recommending at least 150mins of moderate intensity physical activity each week to stay healthy and reduce the risk of developing cardio vascular disease?

Yeah I've definitely seen it, I can't remember exactly where – it might have been like in doctors surgeries and things, but I do have that 20minutes a day and the 5 pieces of fruit and veg a day, and the water as well, so those messages have got through to me, like I have taken them on-board. But I always think that it's the minimum amount, like I don't think 20minutes of exercise a day is that difficult for most people. Especially like I walk to uni and stuff so I easily do that anyway.

Do you try to reduce sedentary behaviour and time sitting down?

Yes if I can, I mean a lot of time I'm at a desk so it's quite hard to but yeah I just get up and walk around every hour or something, it just keeps you moving a little bit.

So you do think about reducing future health risks? Does that come into it, as well as how it makes you feel today?

Yeah a big part of it is. I know that as you get older it gets harder to get up to certain fitness levels so I think that if you don't have it from, say I'm 25 now so if I don't stay fit now, when I'm 30 it's going to be much harder to get back to that level so I try and keep it at a certain level. **To maintain fitness levels?** Yeah.

What do you believe, if there are any for you, to be the main barriers to exercise or to being active each week?

Me specifically, for me it's probably time – like I think if you work over a certain amount of time in the day, you get home and you just can't be bothered to go running so that's why the football works really well because I know I have to be there at that time so I make plans be there and do that, but if it's just me saying oh I might go for a run I'm not really committed to that so it's easy for me to back out of. So the main thing for me is not committing to my individual plan rather than a group plan to do exercise.

Lack of time doesn't really come into it unless you haven't got arrangements or haven't made specific plans?

Yeah it's about making time for it I think, and that takes a bit of effort. So I would say I do normally have enough time to do some but it's like how easy is it to back out of it if you can't be bothered – that's the barrier for me I think.

Is there anything else in terms of your physical activity or nutrition which we haven't really covered?

I think in terms of barriers, I would love to go and play football somewhere, you know, without necessarily booking it as a team and doing that – like just going for a kick around in the field, but I think that there's not really the places where you can do that so that's kind of a barrier. You have to get a group of people together to go and get a place to play football. I think if there was one you can just go and take a ball I would be more likely to do that more often as well.

Do you think there should be more facilities then, to encourage people to play sports?

Yeah it's something that's quite frustrating I think, because there's a really good football pitch down the road from here but in the summer they take away the goal posts because they don't want people hanging off them and stuff. So it just doesn't make sense to me because I think people would go and play there, so I think that the facility is there already, they just need to make the facilities more accessibly – free and there all year round. That's the barrier.

Do you every see anything promoted, either from local authorities – in libraries or gym or wherever you go, do you ever see much promoted in terms of facilities available, or classes, or nutritional information available?

Yeah I mean I'm at uni at the moment and there's a lot of stuff about being active at uni. Like they tried to get people to sign up to that 10k and they try and get people to join. But do you mean for the government more? **Well both actually..** Well from the government, I know that the swimming pool is quite cheap and the gym is quite cheap so I know that that's an option and I've seen like summer discounts at the local council gym, which they do advertise.

As a Trafford resident, do you think there is enough being done?

Yeah, I think the facilities are there, I do wonder if they could make better use of them. So like the football pitch and there's also a climbing wall on the outside of our leisure centre but I don't think they use it anymore, maybe it doesn't work anymore. But I think it's the kind of thing they should keep, you know refurbish it, and get people, if they think about they've built these facilities and how many people can they get on every day – I think that's what they should be thinking about.

It has come up a lot that the facilities are there but they aren't necessarily being used...

I think for kids and stuff it should just be free, everyone complains about kids you know being anti-social or causing trouble, if they just had a place to go and play football I'm sure they wouldn't do that, you know, they wouldn't be causing trouble. So I think just have them free and let them play there and then we'll see more results at the Olympics later [laughs]

Yeah and then if we can create the enjoyment and competitiveness from a young age, I guess by the time they are our age they are more used to being active..

Yeah so the social side as well, to make it enjoyable for them, rather than having like football coaches that shout at them and shout abuse them – just have it like a fun thing to get involved in.

End of interview

Participant 9

Is there anything in particular that motivates you to eat healthily each week?

I think my diet is quite unhealthy because I eat lots of sweets. I think the vegetable one is because my boyfriend is vegetarian so it's quite difficult to cook separately if I want to eat meat so I just might as well give up eating meat [laughs]. If I cook by myself I have vegetables but I'm not sure I'm worried about it because I always had meat before but I think this year I've just stopped by quite a large amount, my meat acquisition, like for a year so I thought that's not very healthy.

Have you felt any better from changing your diet a bit and not having so much meat then?

I think generally, not just red meat but chicken, lamb, fish and all of the animals I just don't really have them. But recently I got a bit of hair loss so I wonder... and also my skin is quite itchy and stuff, and I searched because I thought it might be I'm allergic to stuff, but some people say it might be because of the lack of iron, so I'm not sure.

Before you changed your diet, do you think you were eating healthier then?

I wouldn't say it was healthier really because I think I had too much meat before, and especially back home in Asia we had meat every meal so sometimes you can just have a meal that's all meat and nothing else – so I think I was worried I was going to get a stroke because I never exercise! But then I don't eat meat now I feel maybe that isn't healthy either!

So do you think about your health in the future and how what you eat now may affect you in the long term?

Yeah of course I'm worried about diabetes because I have too much sweets and crisps and things, not really healthy options, so I'm trying to eat more vegetables or fruit to get a balance. But I also think, I'm worried if I don't eat meat in the future maybe it's not very nice because I think my body was used to that so my only problem now is just that I have to decrease my sweet consumption – I need to stop having so many sweets! But generally I think I avoid eating a lot of fat from not eating meat so maybe it's good for my blood or something.

Where would you get information about what's good for you or what nutrients or vitamins you should be getting, or information about how to eat healthily?

No I don't particularly read books or search for information like that because my mum is quite aware of nutrition and what kind of foods I should eat or not eat. Especially we have Chinese medicine so in vegetables sometimes you have to eat certain type of vegetables in summer and sometimes you have to avoid some in summer and have some in winter or avoid particular vegetables in winter, so my mum always says eat this and if you're going to cook this then you have to add something else in the winter. So I'm quite aware of it not because of websites or whatever, just because my parents taught me.

Are there any aspects of eating healthy that you enjoy? Such as shopping, cooking, meal times as a social occasion with friends/family?

Yeah I think it's quite normal to have a meal as a social activity. I wasn't so interested in cooking before because I think it's quite time consuming but I think it's more popular in the UK especially as you don't really eat out very often so I cook more. I think if I'm here I cook more and spend more time thinking about what food I should have and trying to manage my nutritional stuff myself. But also because if I cook more by myself at home, I don't really eat with friends or share that kind of social activity.

Is improving your diet or trying to eat healthier something you think about?

I think I wasn't thinking about it because I think I'm very picky, I just have specific – like if I like spinach I just have spinach every day, I've always been like that. But then I've realised that I

can't do that anymore because I have to cook for myself and I realise that I'd end up just having that all the time without other foods, but when I was at home because we eat, Asian people eat out more, so if I go to the shop and I think oh I go for this meal too much, I avoid it and change to another one – but if I cook by myself I just have to remind myself I eat something too much recently.

Are there aspects you find difficult in trying to eat healthily?

I think yeah naturally I like cakes and sweets and that type of thing, but for food shopping I try to not get processed food, like I try to buy vegetables and real foods rather than microwave food.

I'll move onto physical activity - do you think you are active each week and do enough exercise or physical activity, or do you think you should do more?

Definitely I have to do more because I don't really do exercise. I'm just too lazy. I don't like the feeling of sweating, it just annoys me and I don't like to do exercise.

So are there any activities or sport that you enjoy doing?

Hmm I quite like cycling but I don't have a bicycle here but yeah I do like cycling. That's probably the only thing, I do walking and cycling – I don't really do other exercise that will make me sweat too much.

Do you think it is important to be active? Is it something you think about?

Yeah I think it is very very important so I'm just worried about it's not good for me and for myself. Oh when I was in uni it wasn't so popular to do jogging and now recently it's been quite a popular thing, but when I was in uni it wasn't so popular and the girls on our course – we know that we don't do exercise but we also know that it's not good for our health. So we would do some mild exercise in the room and I think it's quite convenient because you don't have to be worried about it's too late or you can just do ten or twenty minutes and stop yourself. I think yeah I remember we did that, and if you don't want to do exercise with other people then you can just stay in your room and do that.

Do you not do that anymore?

Not now but yeah, not this year I haven't.

What are the reasons for that?

I think it's just because Masters is just too difficult to have spare time to dance in the room
[laughs]

So is it that you have other priorities? How much of a priority to you is being active or exercising?

I think it's important for long term because I really see people suffering from strokes and things, I think oh it is a horrible thing and well I think, I just don't have time to do it now so I just stopped doing that type of indoor dance now. I also think that because in the UK it's quite popular to go to clubs compared to back home, it's not like everyone does but it is very normal everyone goes to clubs in the weekend and I do think that's kind of exercise, the dancing and everything. Also when you're a little bit drunk you don't care about the sweating and everything [laughs] so maybe I do have balance!

Are you aware of the UK government guidelines recommending at least 150mins of moderate intensity physical activity each week to stay healthy and reduce the risk of developing cardiovascular disease?

No not really, I'm quite surprised because like I heard that UK government has got guidelines for healthy exercise and food- like how many vegetables you should have every day or something and I knew they do this type of things when Josh mentioned it to me, oh okay when we are writing essays you can use this... but apart from that I never really see any adverts or leaflets telling people you should do that. But maybe it's because we don't have a TV so maybe they do some adverts, but I've never seen them around uni or in the streets. So I thought you don't care about this [laughs]

Do you think it would be more useful if there was more information?

I think it's good if you have extra like I know some places back home in my country they say OK if you go up these steps you've ran all of however many calories, so I just think that we all know that doing exercise is good for you but I think that kind of thing pushes you a little bit – you think oh maybe I should use the stairs rather than escalators sort of thing.

Like little realistic steps you can take...

Yeah, I think it's good and also I think definitely people know we have to eat vegetables but if you have something to push you a little bit then that's good.

Do you think there are enough facilities in Trafford or at your university, which you can access?

Yeah we have gyms around the uni, there are two. I think they didn't really have a lot of adverts saying oh yeah come and do this and have a healthy life and stuff. But I don't think it is very difficult if someone is very interested to do something I think it's not difficult and it's quite nearby, there's one near my house as well so I wouldn't say it's difficult to access, but they don't really promote it enough.

Are there any other barriers or things that make it difficult for you to be more active or anything else involved? You mentioned not enjoying exercise, is that the main thing?

Yeah that's the main thing and also I think when my skin gets too hot I get some allergic reaction which makes my skin quite itchy, but my mum will always say that is because you don't do enough exercise so you have to push yourself a little bit more [laughs]. Yeah then you will get used to it. I think definitely because I'm lazy and don't really enjoy it but I think that if

my social group all liked to do certain type of mild exercise that definitely would be part of my life. Then you can just, instead of saying oh lets go to a restaurant we go to do something else, I think that would be a good thing for me, to make me want to do it more.

If other people are doing it with you it makes it more enjoyable?

Yeah then it doesn't feel very boring to do it.

End of interview

Participant 10

How important do you think it is to eat healthily?

I think it's fairly important. I don't necessarily know that mine is all that healthy but I think it's good to have a balance rather than just eat solely healthy...it's good to have a bit of a treat and stuff.

Is it part of your life each week to think about what you eat?

Sometimes I'll think like, I'll make a salad or something as that's healthier as opposed to having a take away or something. But then I'm a bit naughty because if I do fancy a takeaway I'll just have one and that could maybe be twice a week or something but I think you feel better when you do eat healthily in general rather than having takeaways. But I do think in the summer months I eat healthier cos it's hotter and I don't like having hot food in the summer so I eat a lot more salad in the summer which makes me feel a bit better.

You said it makes you feel better so generally, the advantages to you of eating healthy, is it more about how it makes you feel?

I think, I mean, I don't really know tons about nutrition and stuff, but I think if you know a lot about it, you know what it's doing for your body. I don't really know about toxins and bits and pieces but I think generally, I don't get as bloated when I have a salad as opposed to when I have a McDonald's or something. I suppose it's time as well, it's fairly easy to make a salad as opposed to a roast dinner or something that takes, like, 3 hours or whatever. I think especially in summer, it's nicer to rustle up a salad so I think the weather affects my diet a bit.

So is time not really a barrier for you? Does time available to you ever affect what you eat?

Yes, I think, like, if we've both got in late, we'll be like, can't be bothered making something so we'll just have scrambled egg on toast or something so when you get in it's just something quick as opposed to if I've got the day off then I can be prepping a bit more for a meal that takes longer. Sometimes you think, I can't be bothered so I'll just have a takeaway. So yes, time is a bit of a barrier.

Is there anything in particular which motivates you to eat healthy? Anything which makes you think, oh, I'll make that salad rather than get the takeaway?

Normally it's more what I feel like and sometimes, for some reason, all my social media is just girls with abs and stuff at the minute so I flick through those and I think, I should probably have a salad. But then sometimes I just think, I can't be bothered – they're them, I'm me! But then my boyfriend eats pretty healthily so sometimes I think, he'll shout at me so I'll just have the salad. Normally I'll just go off what I can be bothered doing really. So if I can't be bothered it's probably going to be a takeaway.

So does it help you if you have people around you who eat healthily?

Yes, I feel bad if I'm just eating takeaways and everyone else is saying, I've had chicken and broccoli. Yeah, so if people around me are eating that then yes.

Is it easier eating a healthy diet when you enjoy it? For example shopping for healthy options in the supermarket, sharing mealtimes as a social occasion with friends or family? Does the enjoyment come into it?

Yeah, I think I get enjoyment from prepping a salad with my mum and putting loads of bits together and I think shopping for healthy stuff is good – it makes the trolley look a bit nicer. You can go like, look at my lovely trolley! So yes I think rather than it piled high with chocolate and stuff, it looks better. Then I think you feel good about yourself getting healthy stuff so you know, you're kind of helping your body a bit, although I don't really know how!

When you said that you don't know how, do you think that there's enough information available about nutrition and healthy eating and how to cook healthier meals? Where do you get your information from?

I think if you really want to find it or information then you can. Like I just choose if I want a recipe then I'll Google it or just Google what goes with eggs or noodles or something and get loads of recipes. I think there probably could be a bit more info on things like food groups and toxins and stuff cos I'm a bit dense about things like that. So I think, I mean I know there's information but maybe it could be broken down a little bit more, like, not dumbed down but more easy to digest, excuse the pun. It probably would help me eat healthier, I imagine, if there was easier information. I don't calorie count, I don't have time to do that. But I think it's difficult to think like, so there's this in that so I can't have that with that. So yeah, I think it would be a bit easier if there was more accessible information broken down.

Do you find it difficult to eat a healthy diet regularly? Is it difficult to maintain healthy eating habits?

Yes. Yeah, like, I'd say when you're working it's a lot harder rather than if you have a day off then you've got time to think about it: so you've got time to have a healthy breakfast, you've got time to have a healthy lunch, then when you're at work it's just right, I'll just grab whatever is going and that can be healthy or unhealthy. Then once you get in, I'm knackered I'll just grab, again, and that can be healthy or unhealthy. So I think yes, work is or having children...although I don't have them it's about chasing round after them... so it all gets in the way. It would be nice to just eat healthy all of the time but I think sometimes, I just can't be bothered. I think it's easier to just be like, I'll get a takeaway but it's probably not - it would probably be quicker to make a salad rather than order a takeaway then wait for a takeaway. But I think, there're there so like, I'll just have one.

Do you think it's a temptation to have so many takeaways and fast food places?

Yes, you see them everywhere, don't you? I mean it's like, oh, I'll have a pizza later and lots of other people do it, 'Oh I'm having a pizza, it's Friday night, pizza night'. Then you get all the crap through the post and you think, oh, save money, they tempt you in. Or on the telly, though you don't see as much – Marks and Spencer's look quite nice for food but I think they need more healthy adverts and that would help. It's all just Dominos, Pizza Hut, and then it's like, em, ok, but there's probably too many of them.

Are there any other barriers that affect you? When you're at work, what your colleagues eat?

We've moved buildings but there was a vending machine where I used to eat all the time, which was a barrier, just the vending machine. But then that's been moved upstairs now so I've not had any as I've not even been upstairs, but I only do 4 hours so I don't have a break, which is quite good. Everyone, from what I've seen, seems to eat fairly healthily, they all bring in little salads and stuff so if I was to be there over lunch, I imagine that would probably help. The vending machine was a bad idea but now that's moved. I think it's just having the time to do it and just how you feel- if I can't be bothered then it's probably not going to happen.

In terms of priority for healthy eating – is it something you prioritise?

I don't think I prioritise it as much as I should. It's kind of normally, just grab and go kind of attitude I think. Like, it would be nice as I say, my boyfriend does it and I admire how much he does it and he does it throughout the week....I should have brought him cos he would have been good. He can do it throughout the week – chicken and broccoli for breakfast, which is just, wrong! Then he's like, you should'nt be having sugary cereals, we were born to have chicken and broccoli for breakfast.

Does he struggle to maintain that?

Well actually, he is really good and he can do it from Monday to Friday then at weekends - he sometimes goes through phases when he can do it weekends as well but then he's pretty miserable to be honest – but sometimes he'll have a break at weekends and like, we went out for a burger last night but he'll get straight back on it on Monday. He goes to the gym four times a week and I admire how much dedication he has. All he's ever doing is cooking chicken which I suppose, if you do prep it like that, cooking the chicken for the week, to have cold or whatever, that's a good way of doing it. Thinking ahead and then it's easier when you get up during the week.

Have you ever tried meal prepping in advance?

We used to have a bit of a plan for what we'd have say, Wednesday would be pasta night, and then you know what you're having. So, yes, that did help and I think it helped with the, 'can't be bothered' so it's like, we have to make it. But then that went out of the window. Though we'll make a big chilli and freeze some of that but I think it's difficult if either you forget or other things get in the way. We do a little bit but not as much as we could do.

How important do you believe it is to be active each week, with being active not just exercise in the gym?

I think it's important. Whether I do it or not is another thing. It's like, I'm not one of those gym bunnies like he is, partly cos I'm not overly fussed about the gym – it doesn't really interest me, or jogging or things like that. I have to find something that doesn't really feel like exercise, like we sometimes play tennis, that doesn't really feel like exercise to me. I think it is important, you can't spend your life sitting on your bum 24/7, you have to get up and about.

I think mainly for your body I mean again I don't really know how the body works as such but you know you can't just, you know, especially if you do what I do and have takeaways, you can't just like sit on your bum all day cause then you'll just get fat everywhere and that's just I know that's not good for organs and stuff. But then I think like it's important to do stuff, it does make you feel better like a brisk walk around the block for ten minutes and it's fun if you're playing something that's enjoyable like tennis or swimming or you know, it's enjoyable to do and it doesn't feel like exercise. Like I say, gym doesn't particularly do it for me – like jogging, I see people jogging and I think just have a walk or go swimming or go play tennis, I mean obviously they have a different mindset and it does it for them, but I prefer to do something that's more fun.

Have you found exercise or activities that you enjoy doing?

Yes, tennis.

Do you feel it's easy to be able to do that, as a Trafford resident, are there facilities to play tennis?

Yeah, yeah, I mean we go to, we've not been because the weather's not been marvellous, but we found Wythenshawe Park is quite good. At first I probably thought there's not that many places but when you look it up there is quite a few and then you can go to Wythenshawe Park and then it's free so we used to go, like once a week. I think that's a nice activity and it's nice when you go and you see loads of other people doing it as well so I think as I say, we were a bit like well where do you go, but then you look for it and there's all these places. So like tennis, I can go and say I'm going to play tennis and it doesn't necessarily feel like I'm going to the gym to do exercise. It's like I'm going to play tennis - dance things like that. I don't mind walking, jogging I don't like, walking I don't mind – and that's sociable I think. We can go for a walk down by Sale water park or whatever and you can just chat and it's like wow, I've just done loads of exercise and I didn't really realise, so I think for me I have to find things I enjoy doing rather than to be like 'you must go to the gym to exercise' – it's like well no, you don't need to.

So do you find the gym environment stressful or boring?

Yeah I think the gym is a bit. I'm a bit self conscious at the gym I think, just because... not that I don't fit in at the gym I just don't think.. I think you have to have a really focussed mindset to be at the gym whereas I probably prefer to exercise like I say, doing something that I enjoy more. I don't mind the gym but it wouldn't be my first choice to go and do some exercise at the gym. I think it's expensive as well whereas you can do tennis and other things for free.

How about group classes, do you ever do anything like that?

We did yoga once I think, but no I think again I'd be a bit self conscious in kind of a close proximity, like if you're walking or playing tennis people are kind of apart.. I think it's the close proximity I don't really like as well, I'm a bit restricted and I like to kind of just be doing my own thing. I think they are a good idea, group classes, and I think if I found one that I liked – I mean saying that I do want to go back to dancing which is a group class, but again getting up the courage to do that, because I'd be a bit self conscious. But again that's like, doesn't really feel like exercise because you enjoy it. I don't know, I think Dan must enjoy the gym because he goes 900 times a week but I mean that's kind of his mindset, he enjoys that and he does all the protein and stuff that he eats, and big bottles of what looks like sand – but he obviously enjoys that, it makes him feel good and he gets results, he enjoys it so he carries on.

So do you think from seeing results, that can help?

Yeah I think so, he must enjoy it because he's done it all this time, since I've known him and before that so he must enjoy it and I think it's quite a close gym, like so they are all close at the gym so he's got friends at the gym and I think when he sees results [laughs]. I mean he said to

me the other day “press my stomach it’s muscle!” so obviously it’s the results. I think the results help him.

So if you are playing sports such as tennis or dancing would you want to see yourself improving each time or is it not something you think about, is it just the enjoyment factor?

Erm, we did do, I’ll tell you what we did do, on a Wednesday night we used to do like a little work out session in the gym because he used to be a personal trainer, so he’d be like my personal trainer, which was quite good. I mean I was self-conscious in front of him but that was quite good you know, once I saw a little bit of results that was.. I think results are a big motivation, it’s just trying to get them so it’s like when nothing happens it’s a bit of a bummer. But yeah I mean like he obviously enjoys that. I enjoyed the training in the gym a bit but I prefer to go off and do something a bit more enjoyable, and then not realise you’re doing it. I think that’s just a different mindset rather than I mean once we were doing the garage workout thing, he’d tell me to do these little sets of whatever, and I did get into a stage of doing loads of sit ups and I was doing bits and bobs and then I just seemed to get out of them – I don’t seem to have a long term focus on it, I seem to have peaks and then oh that’s gone. If you’re not really overly keen then it’s hard.

In terms of facilities, such as tennis courts, one thing that’s come up quite a lot is that there are quite a lot of facilities in Trafford but they aren’t really promoted and people don’t know that they’re there. Do you find that there’s much information showing what’s available or how to take part in activities?

I think there could definitely be more promotion for stuff like that. I mean I think I’d heard from somewhere about the tennis at Wythenshawe park but then I had to go and find that out rather than it being clear... and other things I couldn’t really tell you what places do what, you know, what places there are around Trafford. So I think there could be a lot more promotion, just I don’t even know where but like town centres and places, saying come and play tennis it’s free at Wythenshawe park. So obviously people around there know about it but I think it needs to be a lot more, maybe adverts on TV and stuff rather than fast food and stuff, you know rather than having to find it yourself for you having to have to put the extra effort in. I mean obviously it’s easier these days we just Google it but I think rather than having fast food on telly put a bit more of – you can do this and I think tennis on the telly was trying to do it you know when Wimbledon was on, they were like oh you can play at your local, go on the website and stuff. And I think with the Olympics on at the moment, that’s a good time to get people in at the moment, but there’s just like I say, I couldn’t tell you necessarily what Sale leisure centre does and things like that - you’d have to make an effort to find out, which obviously you can do, it’s not a problem but if there’s other stuff out there to be in your face a bit more I suppose.

Maybe on social media?

Yeah that’s true, there’s nothing on there is there about you know, come and play tennis or come swimming or I don’t see anything actually, thinking about it – it’s all Juiceplus and those

things. I don't think I've seen anything really. I think it is difficult to try and aim it at different areas of the country and stuff, but it's doable. But yeah social media would be a good one but I've not seen anything about it, there's nothing like that on social media – it would be a good idea.

If you saw something nearby, promoted in the local park or somewhere, would you be more likely to go along?

Yeah I mean if it's local, it's handy if it's local – Wythenshawe Park is up the road from me. If it's a bit of a trek I think that puts another barrier up you know, if it's like oh I have to go to the middle of Manchester to go swimming or whatever, but if it's local it helps and then obviously that's a budget for setting up things that are local to everyone. But yeah if it was on then like you say everyone is on social media pretty much, so if you see that oh they have this on at Sale park or saying that, they have gym stuff at Sale park don't they – you can go on little bikes and things like you're at the gym, I was like yeah that's a good idea. I only saw it because I went there and I wanted to go on it but he wouldn't let me... but yeah things like that you know, there were little kids on it and stuff so if you put a bit of money into it and promote stuff and then, I suppose you can't do stuff for free because you aren't making any money but then again when you go to play tennis you have to pay for the car park but it's only like two pounds so compared to the gym of £40-50 a month, you know what's that, nothing really. And I think there are little kids that want to do stuff but there isn't much, you know its football on the field that's it, when they could be doing other stuff. So I think more promotion definitely and stuff like that.

Are you aware of the UK government guidelines recommending 150 minutes of moderate intensity physical activity each week to stay healthy and reduce the risk of cardiovascular disease?

Oh is it 150, I did know about it but I think it was about 100 last time I heard. 150 minutes?

Yes 150 over a week, which can be split up into 20 or 30 minute sessions..

Yeah last time I heard about it, it was different, so 150 minutes... what's that, like 2 and a bit hours? I mean I knew you had to like, people recommended 3 or 4 times a week and they'd say it's 15 minutes of brisk walking or I used to go on the bike a bit but again it's just boring like on a stationary bike it's just like... yeah this is great.

Most people know exercise is good for you but do you know why it's good and what it can do for your health and have you seen much information about that?

Yeah I mean people know that exercise is good for later life, like your organs and stuff... I think obviously you don't want fatty layers developing around organs and stuff because that's not going to be good for you when you're older. Then again we say jogging isn't good for you because of your knees and your back, but I think again there could be more information on that – maybe in Doctors surgeries and places where people do exercise or where people don't exercise, to get them to do some exercise. I think you know it's obviously good for you but I

wouldn't say I know necessarily all the ins and outs of why it's good for you. Obviously it keeps you normally from being overweight which obviously links in with cardiovascular, so it's good for that, it keeps you fit it keeps you healthy. But I think I don't think I could tell you in and out detail of what it does specifically everywhere, other than just it's good for you for later on in life, for like cardiovascular and stuff... that's probably all I could tell you, you don't want fatty layers and stuff. It's probably all that I could tell you about it.

Do you think there could be more done then, to provide more information about what physical activity can do for you in terms of your health?

Yeah you know, somewhere on a banner somewhere, "15 minutes of walking stops ..", they did it with smoking didn't they, like one cigarette is two years off your life, you know do it the other way round like 15 minutes of walking is whatever- gives you 5 minutes extra, I don't know. Yeah like at the university where the offices are they have signs up near the stairs saying how many calories you'll burn by walking up the stairs, so then you can think well if I walk up the stairs a few times a day instead of taking the lift then I'll burn this amount and you'd think well I'd rather do the stairs!

Do you think it would be good if they had more signs and banners like that then?

Yeah I think there's generally too much negative stuff, and there's not enough positive stuff and I think for me personally who doesn't know all the ins and outs and things necessarily, just seeing things like 'you burn 100 calories', that to me is like 'oh, that's one or two biscuits' you know, and I'd be like I'll do that. Yeah I think there needs to be things like that, and then you're tempted to take the stairs rather than the lift. Yeah definitely more things like that I think.

So just for the last question, could you summarise what the main barriers might be generally for yourself or other people?

I think the main ones are having either time to do it or time to fit it in with other stuff you've got, other things people have got going on in life that effect them such as with work, having to work late you know, they can't get to a gym class at 7 o'clock and probably I think price is one a bit as well, things are pretty expensive these days for you just wanting to.. for people who you know, like the gym, you're asked to pay like 50 quid a month just for the privilege of trying to keep yourself healthy, but you want us to pay £50 a month as well to do it. I think if there were more things, without meaning to sound cheap, you know for £2, £3, £5 you know, you'd probably be tempted to do it a bit more. You know, that's the other thing about a gym that would be no good to be because I wouldn't use £50 worth of the gym I don't think, so that would be money down the toilet. But I think for little kids, teenagers and younger people, even older people at the other end, you know pensioners who don't have money to throw away either, just having things a bit cheaper and more advertised I think, so you know what's going on and you can take part in stuff local to you – location is key as well I think.

End of interview